

A MANUAL OF SELECTED, EXHIBITIONAL, GYMNASTIC ACTIVITIES

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by
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**Dissertation submitted to the Faculty of the Graduate School
of the University of Maryland in partial
fulfillment of the requirements for the
degree of Doctor of Education**

1951

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PREFACE

This manual deals with activities which are allied to gymnastics. For the past fifteen years the writer has had an ardent interest in all forms of exhibitional gymnastic activities which might be incorporated into the physical education curriculum. Even though these activities play a major role in the physical education and recreation programs of some institutions and communities, this is the unusual situation. It is believed that if instructional literature in exhibitional gymnastics were more widely accessible, more interest in these activities would be aroused.

Five years of experimentation with the University of Maryland Gymkana Troupe has served as a basis for the ideas found in this manual. Interviews with professional performers, correspondence and conversations with educational leaders who were interested in these activities, and the teaching of a course entitled "Individual Exhibitional Activities" have been of inestimable value in the development of this manual.

The writer is indebted to a number of people for assistance in the preparation of the manual. In 1936 while a student at the University of Illinois, his initial interest in this area was stimulated by Dr. Hartley Price. He is especially grateful to the students of the University of Maryland whose conscientious efforts have assisted him in pursuing this study. The encouragement and technical assistance of Dr. Benjamin Massey, Dr. Lester M. Fraley, Dr. R. Lee Hornbake, and Dr. Louis Hutte have been particularly helpful in the actual organization and editing of the material.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION.....	1
Purpose of the study.....	1
Importance of the study.....	1
Survey of the literature.....	4
Definitions of terms used.....	5
Scope of the study.....	7
II. DOUBLES BALANCING.....	9
Foundations of doubles balancing.....	11
Shoulder balance stunts.....	15
Mounts to a standing position on the shoulders.....	20
Standing positions.....	25
Swan positions.....	30
Pull ups on the knees.....	36
Hand balance positions.....	38
III. TRIPLES BALANCING.....	42
Elementary stunts.....	42
Intermediate stunts.....	49
Advanced stunts.....	53
IV. CHAIR AND TABLE BALANCING.....	61
Equipment used.....	61
Individual stunts.....	63
Partner stunts.....	72

PAGE	CHAPTER
75	V. COMEDY.....
75	Comedy stunts using the horizontal bar.....
77	Comedy stunts using the parallel bars.....
83	Comedy stunts using the trampoline.....
90	VI. THE HUMAN FLY.....
90	Equipment used.....
91	Human fly walking.....
94	VII. THE INON JAY.....
94	Equipment used.....
96	Individual from Jay stunts.....
99	Partner stunts.....
102	VIII. THE ROMAN CHAIR.....
102	Equipment used.....
103	Preparation for Roman chair lifts.....
106	Roman chair stunts.....
110	IX. ROPE SIPPING.....
110	Equipment used.....
111	Individual stunts; one rope.....
115	Doubles stunts; one rope.....
116	Individual stunts; one rope three performers.....
121	Partner jumping; one rope three or four performers.....
122	Individual stunts; two ropes three performers.....
126	X. THE BLACK AIR.....
126	Equipment used.....
126	Stunts.....

CHAPTER	PAGE
II. THE SPANISH WEB.....	135
Equipment used.....	135
Stunts.....	138
BIBLIOGRAPHY.....	143
ANNOTATED BIBLIOGRAPHY OF SELECTED LITERATURE.....	145
APPENDIX.....	170

LIST OF DIAGRAMS

DIAGRAM	PAGE
1. Balancing chair.....	62
2A. Front view of table.....	62
2B. Side view of table.....	62
3. Revolving swivel.....	62
4. The Roman chair.....	102
5. The slack wire.....	124
6. The Spanish web.....	137

CHAPTER I

INTRODUCTION

Purpose of the Study The purpose of this study was to produce a manual of selected, exhibitional, gymnastic activities which could be used by physical education teachers for instructional purposes.

Importance of the Study Most of the literature describing gymnastic stunts has been written by physical educators. Many books and articles have been written on competitive gymnastics, but there still remains a need for instructional material in exhibitional gymnastic areas such as: handbalancing, chair and table balancing, comedy gymnastics, iron jaw, Roman chair, rope skipping, slack wire walking, and the Spanish web. There are other activities in the field of exhibitional gymnastics, but they are not within the scope of this study.

Evidence for the need of instructional material is shown in the catalogs of some of our schools of higher education. Slippery Rock Teachers College¹ lists Physical Education Activities VII as a course in which one develops a proficiency in individual sports and gymnastics as well as learning to organize exhibitions and demonstrations.

The University of Illinois² lists P. E. M. 38 Circus Stunts as a course which may be selected by any male student. Its activities include: juggling, rope spinning, ladder balancing, globe walking,

1. 1950-1951 Undergraduate Catalog; Slippery Rock State Teachers College, Slippery Rock, Pennsylvania, p. 69.

2. Seward C. Staley and George T. Stafford, Sports Curriculum. (Champaign, Illinois: Stipes Publishing Company, 1946), p. 68.

tester board, tumbling, unicycle riding, object balancing, and risley.

Springfield College³ offers R and C 226 Festivals and Pageantry (Demonstrations and Exhibitions). The catalog describes the course as one that, "...develops an awareness and understanding of the practices of pageantry, festivals, demonstrations, and exhibitions as resources to serve the program needs of public and private agencies."

A recent survey revealed that the physical education programs in the secondary schools of Maryland were not as extensive as they might be.⁴ When such programs exist, the child is required to conform to the school rather than having the school adapt to the child. They preclude any possibility of helping to develop a sound educational philosophy such as the one set forth by Benjamin when he stated, "That society which comes closest to developing every socially useful idiosyncrasy in every one of its members will make the greatest progress towards its goals."⁵ This manual, with its instruction in new activities, will contribute to the enrichment of present programs as well as aiding in the realization of the above philosophy.

Duncan's philosophy of physical education is expressed in a manner similar to that of Benjamin when he says,

The physical education program should not be geared to the expert performer, but designed to develop skills in all of the children so that they may participate with satisfaction and a feeling of accomplishment. A wide variety of activities is essential in a program so that all students may find at least one activity in which they can

3. Springfield College Bulletin, Graduate Study Catalog 1950-52. (Springfield, Massachusetts: Springfield College, 1950), p. 78.

4. David A. Field, "Maryland's Own Dr. Gallups," The Maryland Teacher, 7:6:14, February, 1950.

5. Harold Benjamin, The Cultivation of Idiosyncrasy. (Cambridge: Harvard University Press, 1949), p. 37.

participate with success and satisfaction.⁶

If physical education programs are to provide the maximum benefits to children, they must be diversified; and any satisfactory addition to a program denotes a contribution. All of us are handicapped in one manner or another and cannot expect to reach the same level of achievement in each activity. To be successful, one must receive satisfaction from his participation. Seldom does a well balanced person engage in a recreational pastime over a long period of time unless he enjoys the activity. It is, therefore, desirable for the student to be guided into those areas in which the most satisfaction will be found. Stafford, in referring to the handicapped, states, "...he wants activities which are adapted to his remaining abilities."⁷ The same truth applies to the normal person. It is not to be inferred that the talents of the highly skilled students will be neglected. Those responsible for the co-curricular program should give consideration to such individuals.

Each person strives for success in an effort to fulfill an inner craving, and to gain the approval of the group in order to solidify and improve his status with the members. Is it not the responsibility of the physical educator to offer a sufficiently varied program in order that each student may find a place where his particular talents may be developed to the utmost?

Benjamin expresses this viewpoint when he compares the philosophy of the educational plainsman and the mountaineer as they discuss the

6. Ray O. Duncan, "The Growth and Development Approach," Journal of Health, Physical Education, and Recreation, 22:3:37, March, 1951.

7. George T. Stafford, Sports For The Handicapped. (New York: Prentice-Hall, Inc., 1947), p. 41.

possibilities of teaching tap-dancing to a six year old crippled girl;

"Tap-dancing a first-grade subject?" screams the plainsman. If it's good for one child, it's good for all of them. Democracy demands that they all learn the multiplication tables. If democracy demands tap-dancing at all, it demands it for all."

The mountaineer says, "I am not teaching tap-dancing. I am teaching a shy child to be more confident. I am taking a tiny peak of ability and trying to make it a tower of idiosyncrasy by which one who may be some day a great woman in her own right can get her first secure moorings."⁸

The selected, exhibitional, gymnastic activities offer no panacea for all of the students who have been unable to adapt themselves to current physical education programs. There are some students who yearn to do something daring, others who want to exhibit feats of strength, and still others who desire to find an avenue of expression in which they can exhibit dexterity as displayed by the slack wire performer. It is believed that this manual will help teachers to satisfy the needs of these students.

Survey Most gymnastic books have stressed stunts on apparatus or in Of The Literature tumbling. The U. S. Navy⁹ exemplifies this viewpoint in its ture profusely illustrated text. La Porte and Renner¹⁰ devote approximately half of their book to individual tumbling, and the remaining half to combination tumbling. Most of the stunts in the latter section are "pitching" rather than "balancing" in nature. Griswold¹¹ is concerned primarily with illustrating and describing numerous stunts

8. Benjamin, op. cit., p. 34.

9. U. S. Naval Institute. Gymnastics and Tumbling. (New York: A. S. Barnes and Company, 1944), 472 pp.

10. E. R. La Porte and A. Renner, The Tumbler's Manual. (New York: Prentice-Hall Inc., 1938), 122 pp.

11. Larry Griswold, Trampoline Tumbling. (St. Louis: Fred Medart Manufacturing Company, 1948), 120 pp.

on the trampoline. Beyer¹² was venturesome in his presentation of both sexes participating in adagio stunts. For many years Mc Clow¹³ has been the outstanding source for both competitive and exhibitional tumbling routines. West¹⁴ has demonstrated a new approach by classifying similar stunts together regardless of the apparatus used. It was this reference that suggested the procedure for organizing the handbalancing sections in this manual.

There have been several authors who sensed the need for literature in the exhibitional area. Gray¹⁵ explains the organization of demonstrations and lists valuable sources, especially in the dance. Tibbel's¹⁶ book has been considered an excellent reference for teachers responsible for an elementary school circus, and the work of Cramlet¹⁷ has been outstanding for the instruction of such activities as: tight wire, juggling, and risley.

Defin- Gymnastic Activities: In the days of the early Greeks.
itions
Of Terms gymnastics included almost any activity that could be done
Used within the walls of a gymnasium such as: running, throwing.

12. Erwin F. Beyer, Aerobatics For All. (Chicago: University of Chicago, 1947), 122 pp.

13. L. L. Mc Clow and D. W. Anderson, Tumbling Illustrated. (New York: A. S. Barnes and Company, 1931), 212 pp.

14. Wilbur D. West, The Gymnast's Manual. (New York: Prentice-Hall Inc., 1942), 326 pp.

15. Miriam Gray, The Physical Education Demonstration. (New York: A. S. Barnes and Company, 1947), 147 pp.

16. Averil Tibbels, The Circus Comes to the School. (New York: A. S. Barnes and Company, 1937), 472 pp.

17. Theodore Cramlet and Russell C. Minote, Physical Education Activities. (New York: Dodd, Mead and Company, 1932), 301 pp.

wrestling, boxing, climbing, weight lifting, dancing, the spear, and the bow and arrow.¹⁸ In the eighteenth century, Adolph Spiess and Friederich Jahn wrote the first gymnastic books and encouraged gymnastic participation in the schools and on the playgrounds. "Play on the balance beam, vertical ropes, ladders, horizontal bars, vaulting bucks, and parallel bars"¹⁹ became a major recreational activity. This was the origin of our modern conception of gymnastics. The National Committee on Gymnastics for the Amateur Athletic Union recognizes the following events for men: Free Calisthenics, Long Horse, Side Horse, Horizontal Bar, Parallel Bars, Rings, Indian Club Swinging, Rope Climb, and Tumbling; and for women: Calisthenics, Parallel Bars (Even), Balance Beam, Flying Rings, Side Horse Vault, Indian Clubs, and Tumbling.²⁰

Activities like baton twirling, juggling, the Spanish web, and the tight wire have seldom been considered to be gymnastic endeavors by some educators. There are those who consider these events as having their place in the circus or in vaudeville, but were not suitable to be included in a physical education program. On the other hand, there are those who believe that events such as the flying rings and the horizontal bar are pure gymnastics and acceptable for the school program. The writer considers gymnastic activities as those stunts that involve no equipment, or stunts that require either standard apparatus or equipment that may be made.

18. U. S. Naval Institute. op. cit., p. 3.

19. Emmett A. Rice. A Brief History of Physical Education. (New York: A. S. Barnes and Company, 1929), p. 119.

20. Amateur Athletic Union. Gymnastics Yearbook, 1951. (New York: Amateur Athletic Union of United States, 1950), pp. 62-86.

Exhibitional Activities: Those activities that are learned primarily to present before an audience.

Understander: Usually referred to in hand balancing, this term refers to the person who acts as the support for the other member or members of the act. In this manual, the understander is represented by the letter "A."

Middle-Man: The middle-man is one of the performers in a triples balancing number. He usually is supported by the understander and acts as the support for the top-mountner. The letter "C" is used to signify this person.

Top-Mountner: The person who usually is on top, or the one who is being supported. The letter "B" is used to signify this person.

Underbalance: This refers to a performer's position when he is inverted in an insecure position, and is caused by the feet not having reached the perpendicular position.

Overbalance: This refers to a performer's position when he is inverted in an insecure position, and is caused by the feet having passed the perpendicular position.

Reaching: A series of stunts in which one or more performers move from one stunt to another in a coordinated manner.

Spotting: The protecting of a performer by another during the execution of a stunt.

Scope Of The Study The following ten chapters contain two hundred and three photographs and six diagrams to supplement instructional techniques for the various exhibitional gymnastic activities. Doubles Balancing is presented in Chapter II since some of the stunts are

basic to activities referred to in later chapters. Triples Balancing logically follows Chapter II inasmuch as the success in many of the stunts is dependent upon the fundamentals learned in Doubles Balancing.

The remaining chapters are arranged in alphabetical order. Chapter IV relates how chairs may provide interesting challenges in balance. Comedy stunts on the horizontal bar, parallel bars, and the trampoline are described in Chapter V, and the unique act of walking with the feet while inverted is in Chapter VI. Chapter VII orients the reader with the Iron Jaw number. Chapter VIII explains the construction of the Roman Chair and some of the stunts for which it is used. Individual and group rope skipping stunts are described in Chapter IX. Chapter X is devoted to the Slack Wire. Fundamental stunts performed on the Spanish Web are described in the concluding chapter.

The Bibliography lists the references used in the writing of the manual, and the Annotated Bibliography lists superior references in the fields of competitive and exhibitional gymnastics. The Appendix furnishes names and addresses of companies that manufacture exhibitional gymnastic equipment.

CHAPTER II

DOUBLES BALANCING

Combination balancing* is one of the most fertile areas in physical education for the utilization of human physical differences, and it is one of the most neglected areas. Doubles balancing is that form of combination balancing that involves two people.

At all levels of instruction, metamorphic individuals have a distinct handicap when tumbling lessons are introduced. Rather than to compel such students to participate in tumbling activities, the wise instructor should supplement his program by including doubles balancing; thereby placing those individuals in a position where they might use their body type to a better advantage. This form of guidance will help the students in finding their rightful place within the group.

It is not to be implied that this activity is solely for the unusual body type. It may be recreation for persons both young and old. This recreational feature should be considered more as one grows older because of the desirability of having a healthful and inexpensive pastime in which to participate during leisure hours.

From the financial viewpoint alone, schools should regard combination balancing as a worthwhile addition to its program. No expensive balls are required, no spacious fields, and no particular weather conditions are essential. This activity may be conducted indoors or out of doors, in recreation rooms, and in small gymnasiums. Though mats are desirable, there are numerous stunts which may be

*Balancing stunts using two or more persons and no apparatus.

practiced in safety on the floor with careful spotting. Neither is it necessary to have a large group before the activity may be enjoyed.

Doubles balancing is not a remedy for all of the defects of the school physical education program. School officials and teachers should, however, recognize the advantages of the activity and give it the place in the program which it merits.

Balance is a prerequisite for success in all of the activities described in this manual. A person in perfect balance is considered as one having his body in a position that provides a maximum efficiency and a minimum of effort. This trait is specific. It has been observed that a person who displays expert balance on the playing field may not exhibit a similar degree of balance on the dance floor. Although balance is specific, it always involves several factors such as: vision, muscle sense, tactile sense, and kinetic-static sense.²¹ When any of these mechanisms are injured, balance is disturbed.^{22, 23, 24}

The particular balance and technique that is required to do a head balance, a hand balance, and to sit or stand on one's shoulders seems to help insure success in closely associated activities. Once a person learns to stand on his head on the mat, it takes but little additional practice to accomplish the same stunt on a gymnasium horse.

21. C. W. Longstreth, "Maintenance of Equilibrium in Aviation," U. S. Naval Aviation Bulletin, 27:2, January, 1929.

22. Samuel Maxwell, Labyrinth and Equilibrium. (Philadelphia and London: W. B. Saunders and Company, 1923), p. 15.

23. A. S. Edwards, "Factors Tending to Decrease the Steadiness of the Body at Rest," The Journal of Psychology, 56:599, October, 1943.

24. Howard W. Haggard, Man and His Body. (New York and London: Harper and Brothers Publishers, 1936), pp. 423-426.

on a table, or on a chair. After one has learned the hand balance on the floor, he has the rudiments to do the same stunt in a balancing act or on objects in the gymnasium. He who has learned to stand on one's shoulders will find this stunt helpful in learning to build pyramids, in teeterboard stunts, in double rope skipping, etc.

In forming a doubles balancing act, it is good guidance to select two students who have a wide weight range. The heavy one should be the understander, and the lighter one should be the top-mounter. The more the two practice together, the more timing they acquire, and the less important the weight factor becomes. Performers should practice the hand balance diligently since this is the fundamental stunt all good balancers must possess.

PART I -- FOUNDATIONS OF DOUBLES BALANCING

1. Hand to Hand Grasp (Figure 1) Starting Position: The understander and top-mounter stand facing each other.

Execution: Each performer reaches across diagonally to shake the other's hand with his own right hand. The thumb of each person grasps between the partner's thumb and index finger, the index fingers grasp over the wrist, and the remaining fingers grasp beneath the wrist. The same description applies to the left hands when they grasp each other. If the performers stand close to each other and face in the same direction, the technique is again the same except that they grasp the nearest hand rather than to reach across diagonally. Unless otherwise specified, this grasp will always be used when performers are required to grasp hands.

2. Wrist (Figure 2) Starting Position: The understander and top-
to Wrist
Grasp mounter stand facing each other.

Execution: Each performer reaches across diagonally to grasp the other's wrist with his own right hand. The thumb of each person grasps over the other's wrist, and the fingers grasp beneath the wrist. The same technique applies when the left wrists are grasped.

3. Head (Figures 3 and 4) Starting Position: The performer places
Balance
his head on the floor, and the hands rest on the floor shoulder width apart and several inches in front of the face. The soles of both feet remain on the floor.

Execution: The performer walks forward carefully with his feet in order to raise the hips. When the hips reach their highest point, one leg goes up in the air, and the other leg follows slowly (Figure 3). Figure 4 shows the final position in which the legs are straight, the



FIGURE 1

Hand to Hand Grasp



FIGURE 2

Wrist to Wrist Grasp

toes pointed, and a slight arch in the back. Most of the weight is on the center region of the head, and the hands act as supplemental supports.

Once the head balance is learned, it should be easy to learn the shoulder balance with a partner. This is described later.

4. Head Balance (Figure 5) Starting Position: When a wall is used to support the feet as shown in Figure 5, the hands should be Support placed on the floor shoulder-width apart, and about nine inches from the wall. The fingers are pointed forward and well spread. The head is up, and the hips are high.

Execution: The feet should be kicked above the head to allow the hips to reach their maximum height before the feet are directly overhead. The arms must be straight, and the weight sufficiently forward to allow the fingers to be the controlling factor in maintaining



FIGURE 3

Walking Forward Into The Head Balance



FIGURE 4

Head Balance

equilibrium. If this position can be held, the feet should be pushed away from the wall to give the performer the sensation of holding the balance without any extraneous support.

5. Hand Balance (Figures 6 and 7) Those performers who can kick into a hand

From a balance with ease should learn to press into the balance.

Press

Position Starting Position: The hands are placed shoulder-width apart, and the fingers well spread. The performer squats, and after placing the hands on the floor, he bends his arms slightly.

Execution: Figure 6 shows how he has leaned forward to maintain his balance after his feet left the floor. He then slowly straightens the arms and legs simultaneously until they reach the finished position as shown in Figure 7. This figure shows the completed hand balance as being similar to that of the head balance except the hands, rather than the head, are the base. It should be re-emphasised that to maintain



FIGURE 5

Hand Balance with Wall Support



FIGURE 6

Pressing Into a Hand Balance

the hand balance position. sufficient weight should be forward to constantly make the fingers work to hold the balance. If the weight goes back to the heels of the hands, an underbalance will result. This necessitates bending the arms and leaning the body forward to equalize the weight on both sides of the fulcrum (the hands). Once the balance has been re-gained, it will be necessary to press back into the hand balance. Nothing is more important in learning the hand balance than the proper use of the fingers.

PART II -- SHOULDER BALANCE STUNTS

These stunts represent balance positions in which the top-mounter's shoulders act as his base.

1. Knee (Figure 8) Starting Position: "A" lies with his back on Shoulder the floor. The soles of the feet are flat on the floor. Balance



FIGURE 7

Hand Balance



FIGURE 8

Knee-Shoulder Balance

and both the knees and feet are about ten inches apart. The arms are straight and slightly forward. "B" places his shoulders in the hands of "A," and his hands slightly above the partner's knees. The feet remain on the floor.

Execution: "B" kicks into the shoulder balance. He must be certain to lean forward and straighten his arms as he kicks into the balance.

2. Low Shoulder to Shoulder Balance (Figure 9) Starting Position: The Knee-Shoulder balance. Execution: "A" gradually brings his arms backward until they are vertical to his horizontal body. While he does

this, "B" changes his grasp, one hand at a time, from the partner's thighs to his upper arms. The feet lead the way in shifting the balance, and the hands follow.



FIGURE 9

Low Shoulder to Shoulder Balance



FIGURE 10

Starting Position: High Shoulder to Shoulder Balance

3. High Shoulder to Shoulder Balance (Figures 10, 11, and 12) Starting Position: Both performers stand erect, facing each other, and about two feet apart. "B" grasps high and outside on "A's" arms, and the latter grasps high and inside "B's" arms as shown in Figure 10.

Execution: "B" jumps high on "A's" chest. The latter bends forward at the waist as shown in Figure 11. He straightens up vigorously and pushes his arms upward to a locked position overhead. "B" simultaneously leads with his hips, and the feet go overhead until he is in an outstretched inverted position as shown in Figure 12. If the feet lead the hips, an excess arch frequently occurs, and the top-mounter does not reach the inverted position.

4. High Shoulder to Shoulder Balance on One Arm (Figure 13) Starting Position: High Shoulder to Shoulder balance.

Execution: "B" shifts his weight to the right to allow



FIGURE 11



FIGURE 12

Preparing to Extend Upward in High Shoulder to Shoulder Balance High Shoulder to Shoulder Balance

"A's" right hand to shift from "B's" upper arm to a position on the clavicle near the neck. "B" then shifts the weight to his left arm and grasps "A's" upper right arm on the inside near the shoulder.

For a variation of this stunt, "B" may lean his weight somewhat farther to the left, and place his right hand to the side. The balance will then be maintained by but one arm of each performer.

5. High (Figure 14) Starting Position: High Shoulder to Shoulder One Arm Lever balance.

Execution: "B" shifts his weight to the right to permit "A" to lower his right hand grasp from the shoulder to the lower part of the upper arm, just above the elbow. The top-mounter then slowly allows his weight to lower to the left until his body is parallel to the floor. He then removes his right arm and places it to the side as shown in Figure 14.



FIGURE 13

**High Shoulder to Shoulder Balance
on One Arm**



FIGURE 14

High One Arm Lever

6. Shoulder Balance on the Feet (Figures 15 and 16) Starting Position: "A" lies flat on his back with the legs bent, and the feet overhead. The arms are straight up. "B" stands near "A's" head and faces in the same direction. He grasps his partner's hand to hand, and places his shoulders on the soles of "A's" feet, allowing space on the feet for his shoulders to rock forward when he kicks into the shoulder balance. See Figure 15.

Execution: "B" kicks into the shoulder balance and straightens his arms. "A's" legs straighten simultaneously. Figure 16 shows the shoulders on the feet, and the hands used for auxiliary support. "B" may release his hand to hand grasp and hold "A's" calves.

7. Free Shoulder Balance on the Feet (Figure 17) Starting Position: Shoulder Balance on the Feet.

Execution: "A" shifts his feet slightly so that the heels will point in towards "B's" neck, and the toes will rest on the latter's



FIGURE 15

Starting Position: Shoulder Balance on the Feet



FIGURE 16

Shoulder Balance on the Feet

biceps. "B" underbalances slightly, and makes his arms firm in order that they can brace against "A's" toes.

5. Shoulder (Figure 18) **Starting Position:** Shoulder Balance on the
Balance on
One Foot Feet.

Execution: "B" grasps "A's" right leg with both his hands, and shifts his weight completely over to "A's" right foot. The latter lowers his left leg to the floor. If the balance is steady, "B" may remove his right hand and place it at his side. It is important for the supporting leg to be as perpendicular to the floor as possible at all times.

PART III -- MOUNTS TO A STANDING POSITION ON THE SHOULDERS

1. Mount (Figures 19 and 20) **Starting Position:** "B" stands
From a Sit
on Shoulders erect, and "A" stands close behind him. "A" bends in the



FIGURE 17

Free Shoulder Balance on the Feet



FIGURE 18

Shoulder Balance on One Foot

knees, and keeps his feet flat on the floor and ten inches apart. He places his head between "B's" legs, and keeps his hands on his own knees.

Execution: As "B" sits on "A's" shoulders, the latter presses forcefully on the knees and straightens his legs. The shoulders must lead the movement of the hips at all times to help keep the trunk as erect as possible. Without this technique, the back, rather than the legs, will be doing most of the work. Less weight can be lifted in such an instance. As soon as "A" is certain he can complete the lift, he immediately grasps the top-mounter's knees, and the latter presses her legs to his sides as shown in Figure 19. "B" should sit erect at all times.

Figure 20 shows the beginning of the mount to the shoulders from this position. "B" grasps the partner with the hand to hand grasp.



FIGURE 19

Sitting on Shoulders



FIGURE 20

Mount From Sitting on Shoulders

and lifts the right knee high to facilitate the placement of the right foot on "A's" right shoulder. "B" uses the hands for the major support until the right leg is straightened. The left foot is then placed on "A's" left shoulder and straightened to complete the movement.

2. Mount (Figure 21) Starting Position: "A" holds his trunk erect, From the Side the feet a comfortable distance apart, and the knees bent. "B" stands at his left side, grasps his hands, and places her left foot high on "A's" left thigh.

Execution: On a signal, "B" straightens the left leg and steps up to place the right foot on "A's" right shoulder. The left foot follows to his left shoulder. "A" must keep his left thigh firm and pull up hard with his right hand. His left fore-arm should remain perpendicular to the floor throughout the early part of the movement to give the maximum support.



FIGURE 21

Mount From The Side



FIGURE 22

Mount With Head Assist

3. Mount (Figure 22) Starting Position: "A" stands with the trunk With Head erect, both knees bent, and the feet a comfortable distance Assist apart. The left hand is cupped and placed just below the belt. The right hand is above the right shoulder. "B" stands at "A's" left side and places the left foot in "A's" left hand. The right hand is in his right hand, and the left hand is placed on his head.

Execution: On a signal, "B" steps up with the left leg, pushes down on "A's" head, and places the right foot on "A's" right shoulder. The weight then shifts to the right foot and the right hand until the left foot is placed on his left shoulder. "B" then stands erect.

4. Mount (Figure 23) Starting Position: "A" stands with the trunk From the erect, knees slightly bent, and the right foot about ten Rear inches behind the left foot. "B" stands behind him and grasps hand to hand over his shoulders. "B's" right foot is placed on "A's" right



FIGURE 23

Mount From The Rear



FIGURE 24

"Swoop Up" Mount

calf. See Figure 23.

Execution: On a signal, "B" bends his right knee farther, then straightens it out quickly and brings his arms overhead. "B" springs off the right foot as "A" straightens his knee, and lands standing on "A's" shoulders.

5. "Sweep Up" Mount (Figure 24) **Starting Position:** Both performers stand erect and facing in the same direction with "B" slightly ahead of his partner. "B" places the hands behind the hips, and "A" grasps them. See Figure 24.

Execution: On a signal, both performers swing their hands sideward-outward. As the hands return inward, "B" jumps high and keeps the arms straight. "A" follows through by pressing "B" overhead. "B" then stands on "A's" shoulders. With correct timing, little strength is necessary for this mount.

6. Mount, From a Pitch with a Half Twist (Figure 25) **Starting Position:** "A" and "B" stand facing each other about six feet apart. "A" places his left foot six inches in advance of the right foot, and bends both knees. His trunk is erect, and both hands cup each other at the waist.

Execution: "B" runs in towards "A" and places both hands on his shoulders and the left foot in his hands. "B" hops off the right foot, quickly extends the left leg, and pushes off the shoulders. All movements must be synchronized to give the maximum height directly overhead. Immediately after "B" steps into his hands, "A" pushes his arms overhead. When she is in mid air, "B" turns to the right and lands on "A's" shoulders in a standing position. Both performers are then facing in the same direction. "A" immediately grasps "B's" calves.

PART IV -- STANDING POSITIONS

1. Stand On (Figures 26 and 27) Starting Position: "B" stands on Shoulders

"A's" shoulders, and maintains a hand to hand grasp.

Execution: "A" stands straight and keeps his head firm. His hands reach behind and high on the calves of "B" in order that they may pull down hard and firm against his head. "B" stands erect but with a slight forward lean. "B's" heels must be nearly together, and the calves pressing tightly against "A's" head. After this position feels secure, "A" may release his grasp and place his hands at the side.

Figure 27 shows clearly the placement of "A's" hands and "B's" heels.

2. One Foot (Figure 28) Starting Position: Stand on Shoulders.Stand on
Shoulders

Execution: "B" shifts most of the weight to the right foot. "A" reaches behind his head with his left hand and grasps "B's"



FIGURE 25



FIGURE 26

Mount. From a Pitch with a Half Twist Stand on Shoulders; Front View

right ankle. "A's" right hand continues to pull down hard and inward on "B's" calf. "B" raises the left foot backward and upward as shown in Figure 28.

**3. Stand (Figure 29) Starting Position: Stand on Shoulders.
on Head**

Execution: "B" places most of the weight on "A's" hands until the left foot is placed on "A's" head. The inside of the foot should rest on the middle of the head. The right foot then takes its position snugly against the left foot. It is imperative that the toes be slightly forward of the hair line, and both legs must constantly be adducted; otherwise they will slide off the sides of "A's" head. After the feet are in position, "A" grasps "B's" ankles until the latter feels secure; then he releases the grasp and places his hands at the side as shown in Figure 29.

If "B" loses her balance, she jumps either forward or backward



FIGURE 27

Stand on Shoulders; Rear View



FIGURE 28

One Foot Stand on Shoulders

while "2" tries to stand motionless. He does not attempt to re-grasp "B's" ankles. "1" must keep his chin down and his head steady at all times. Although his scalp will move in all directions, this should not cause him to feel that the balance has been lost. The wearing of a small felt hat will alleviate this sensation.

4. Standing (Figures 30, 31, and 32) Starting position: "2" lies Feet to Feet flat on his back, arms straight overhead, knees on his chest, and the feet low. "B" faces his partner and stands close to his buttocks. "2" places the right foot on "1's" left foot as in Figure 30, and grasps him in a reverse hand to hand grasp (the thumbs between the partner's thumbs and index fingers, and the fingers outside of the small fingers).

Execution: Most of "B's" weight is placed on "1's" hands until the right lower leg of "1" is perpendicular to the floor. Only then



FIGURE 29

Stand on head



FIGURE 30

Starting position: Feet to Feet

may "B" release the hand to hand grasp and squat back on both of "A's" feet. See Figure 31. "A" slowly extends his legs upward. The legs should not spread apart, and the buttocks must remain on the floor as shown in Figure 32. There is a great tendency for "A" to extend his legs upward before "B" squats back on the feet, and this must be avoided.

5. The (Figures 33, 34, 35, 36) Starting Position: This stunt
Jumps

involves a series of jumping maneuvers on the part of the top-mounter, all of which must be coordinated with rapid movements of the understander. "A" faces upward and places both hands and feet flat on the floor. The body must be kept rigid and parallel to the floor, while both the arms and the lower legs must be perpendicular to the floor. "B" stands twelve inches in front of "A's" feet, and faces him as shown in Figure 33.

Execution: On a signal, "B" jumps upward and slightly forward



FIGURE 31

Intermediate Position; Standing
 Feet to Feet



FIGURE 32

Standing Feet to Feet

to land on "A's" thighs. "A" must keep his thighs firm and parallel to the floor in order to give a firm, flat footing for the partner to land on as shown in Figure 34.

On a second signal, "B" jumps straight up as high as possible. To assist in this movement, "A" must make no move until "B" is in the air. As soon as "B" leaves "A's" thighs, the latter immediately turns around and lands on his hands and knees. To make this turn with ease, "A's" right heel should be brought underneath the left thigh and behind the left heel. The shoulders rotate simultaneously, and he then drops down on both hands and knees. A moment after he lands in this position "B" descends to a standing position on his hips as shown in Figure 35. If "B" is unsteady after landing on "A's" hips, the latter can move his hips forward and backward to assist "B" in regaining her balance.

On a third signal, "B" jumps as high as possible directly over



FIGURE 33

Starting Position: The Jumps



FIGURE 34

Jump To Thighs

"A's" hips. As soon as "B" is in the air, "A" pushes off the floor with his hands, and straightens his legs. His trunk remains parallel to the floor, and the hands rest on the thighs. By the time he has reached this position, "B" lands in a standing position on his hips as shown in Figure 36.

The final movement is for "B" to jump high again to allow "A" to stand straight, and "B" descends to a standing position on "A's" shoulders.

PART V -- SWAN POSITIONS

1. Low Front Swan on Hands (Figure 37) Starting Position: "A" lies flat on his back; his legs are together and on the floor. "B" stands at his right side facing his head.

Execution: "B" bends at the knees and leans slightly forward



FIGURE 35

Jump To Hips (Kneeling)



FIGURE 36

Jump To Hips (Standing)

so that "A" may grasp her hips. Though persons differ anatomically, the point of balance for most of them is near the crest of the ilium. Therefore, "A" places the heels of his hands on the hip bones, and his fingers point outward.

Execution: "B" leans farther forward and raises the feet and shoulders to attain the desired arch in the back. "B's" hands are then placed to the side as shown in Figure 37. "A" controls the balance entirely by the rotation of his wrists.



FIGURE 37

Low Front Swan On Hands



FIGURE 38

Low Back Swan On Hands

2. Low Back Swan on Hands (Figure 38) Starting Position: "A" lies flat on his back; the legs are together and on the floor. "B" stands astride "A" facing his feet.

Execution: "B" bends the knees until "A" can place his hands on "B's" hips. "B" then leans back and holds an arch as shown in Figure 38.

3. Front Swan on Feet (Figure 39) Starting Position: "A" lies down, legs over-head, and the knees slightly bent. "B" stands close to the partner's legs and faces him.



FIGURE 39

Front Swan On Feet



FIGURE 40

Back Swan On Feet

Execution: "A" places his toes beneath "B's" lower ribs, and keeps his feet parallel to each other. The performers grasp hand to hand, and as "B" leans forward, "A" lifts her from the floor by extending his legs backward and upward. When the balance is secure, "B" arches her back, and the hands are placed to the side as shown in Figure 39. "A's" toes and heels control the balance.

4. Back (Figure 40) Starting Position: "A" lies on his back, legs Swan on Feet overhead, and the knees slightly bent. "B" stands close to the partner's legs and faces away from him. "B" places her hands at the hips, and grasps "A's" hands that have been raised.

Execution: "A" places his feet on "B's" back; the toes being against "B's" lower ribs. As "B" leans back, "A" straightens his legs upward and backward until they are perpendicular to the floor. When the balance is secure, "B" places her hands sideward, and the balance is maintained entirely by "A's" toes and heels as shown in Figure 40.

5. "Y Up" (Figure 41) Starting Position: Back Swan on Feet with Variation of Back Swan on Feet slightly higher on "B's" back.



FIGURE 41

"Y Up" Variation of Back Swan on Feet

Execution: After holding the back swan position momentarily, "B" slowly raises the legs. She grasps the knees and begins to pull her trunk upward to form a "V" as shown in Figure 41. "A" gives assistance when necessary by pointing his toes.

6. High (Figures 42 and 43) Starting Position: The performers Front Swan on Hands face each other. "B" stands with her hands on "A's" wrists or shoulders. "A" places his hands on "B's" hips with the heels of the palms inside and the fingers pointing outward as shown in Figure 42.

Execution: "B" springs upward as high as possible and then arches the back. With the proper timing, "A" uses a minimum of effort and merely stands up and locks his arms overhead. When the balance is secure, "B" moves her arms sideward and allows "A" to control the balance entirely by the rotation of the wrists as shown in Figure 43.



FIGURE 42

Starting Position: High Front Swan



FIGURE 43

High Front Swan

7. High One Arm Back Swan (Figures 44 and 45) Starting Position: "B" stands straight while "A" stands close behind. "A" squats with the left foot slightly in advance of the right foot. His left hand is placed in the lumbar region of "B's" back, and the right hand grasps "B's" right ankle as shown in Figure 44.

Execution: "B" jumps off the left foot as high as possible and slightly backward. "A" simultaneously stands up and locks his left arm overhead. The right hand helps to control lateral movement. After this position feels secure, "A" releases the grasp of the ankle and holds "B" with the left hand as shown in Figure 45. If "B's" right leg is too low in this position, the balance is too far forward. To correct this, "B" should raise the left knee and pull the shoulders back.

8. Torch (Figures 46 and 47) Starting Position: Though this is not a genuine "Swan," it is similar; therefore, it is included here. "A"



FIGURE 44



FIGURE 45

Starting Position: High One Arm
Back Swan

High One Arm Back Swan

kneels on the right knee while his left knee is kept firm, and the left thigh is parallel to the floor. "B" stands facing "A's" left side and places her right foot on his left knee. "A" grasps her right thigh with his right hand, and her right ankle with his left hand as shown in Figure 46.

Execution: "B" springs up high in the air with the right foot as "A" stands up and presses his arms overhead. "B" arches her back, and "A" controls the balance with his left hand as shown in Figure 47.

PART VI -- PULL UPS ON THE KNEES

1. Front (Figures 48, 49, 50, and 51) Starting Position: "A" lies Full Up on the Knees on his back, arms straight up, and both the feet and knees about ten inches apart. The heels must be brought back as close to the buttocks as possible. "B" stands near "A's" shoulders and grasps his



FIGURE 46

Starting Position: The Torch



FIGURE 47

The Torch

Front Pull Up on the Knees

FIGURE 50



Starting Position: Front Pull Up on the Knees

FIGURE 49



Front Pull Up on the Knees with One Hand Grasp

FIGURE 51



Second Position: Front Pull Up on the Knees

FIGURE 48



hands. She then steps through and places both feet on "A's" knees as shown in Figure 48. The toes must not extend far over the knees.

Execution: "B" leans forward, and "A" assists by attempting to sit up. As "A" begins to come off the floor, "B" commences to straighten her legs as shown in Figure 49. Soon after "A" has risen from the floor, he leans backward slightly to prevent "B" from pulling him forward too much. "B's" legs should be straight and the back arched as shown in Figure 50. Throughout the entire movement, the arms of neither performer should bend much. To complete the stunt, "A" reaches across diagonally with his right hand and grasps "B's" left wrist as shown in Figure 51.

2. Reverse One Arm Fall Up on the knees (Figures 52 and 53) Starting Position: "A" lies on his back, the left hand is up, and the right hand is at the side. The feet and knees are about ten inches apart, and the heels must be brought as close to the buttocks as possible. "B" faces "A" and stands on his knees. "B" bends forward and reaches diagonally across with the left hand to grasp "A's" wrist as shown in Figure 52.

Execution: "B" leans backward and pulls hard on "A's" wrist. The latter leans forward and attempts to rise. He may push off the floor with the right hand if necessary. After rising, he leans back gradually to prevent "B" from pulling him forward too much. The completed stunt is shown in Figure 53.

PART VII -- HAND BALANCE POSITIONS

1. Low Bent-Arm Hand Balance (Figure 54) Starting Position: This stunt indicates the beginning of intermediate doubles balancing. "A"

lies on his back with the legs together and on the floor. His elbows rest on the floor next to the sides, and the forearms are perpendicular to the floor. "B" stands near his shoulders facing his feet, and grasps hand to hand.

Execution: "B" kicks into a hand balance. If she fails to hold the balance, she alone tries to avoid a collision with the partner. If both attempt to avoid contact, neither will know the other's intentions



FIGURE 52

Starting Position: Reverse One Arm Pull Up on the Knees



FIGURE 53

Reverse One Arm Pull Up on the Knees

and there will be more possibility of having an accident.

Small children and girls may find it easier to learn this stunt when beginning from the back swan position on the feet as shown in Figure 40. This method eliminates any sudden kick into the position. When properly executed, the top-mounter arches the back and brings the arms overhead and shoulder-width apart until they grasp the hands of the understander. The latter slowly extends his legs upward and backward until he pushes the partner into the inverted position.

2. Low Hand to Hand Balance (Figure 55) Starting Position: "A" lies on his back with the legs together on the floor. His arms are straight overhead, perpendicular to the floor, and shoulder-width apart. "B" stands near his shoulders facing his feet, and grasps hand to hand.

Execution: "B" kicks into the hand balance.

3. High Hand to Hand Balance (Figure 56) Starting Position: This is the basic stunt for advanced hand balancing. "B" stands on "A's"



FIGURE 54

Low Bent-Arm Hand Balance



FIGURE 55

Low Hand to Hand Balance

shoulders and grasps the latter's hands.

Execution: "B" either kicks or carefully presses into the hand balance. "A" must keep his arms straight and shoulder-width apart even though there will be a great tendency on the part of "B" to spread his arms farther apart.

Once the two performers become proficient in pressing or kicking into the high hand balance, they should attempt the Swoop Up mount which is similar to the one shown in Figure 24. "B" stands on the floor in front of "A" and facing away from him. The two grasp hands near the hips. "B" then jumps high and presses into the hand balance once her feet are above her partner's shoulders. As "B" jumps into the air, "A" pushes his arms overhead and keeps them straight and shoulder-width apart.



FIGURE 56

High Hand to Hand Balance

CHAPTER III

TRIPLES BALANCING

Triples balancing is an excellent activity to introduce to performers who have learned the basic doubles balancing stunts. Most of the maneuvers described in this chapter are doubles balancing stunts that have slight variations to accommodate a third person.

The addition of a third performer does not necessitate an unusual amount of strength on the part of the understander since a person well versed in balancing has little trouble in supporting more than twice his body weight. For the most rapid learning of triples balancing stunts, it is most desirable to have a wide difference in the weights of the understander and the top-mounter, while the weight of the middle-man should be midway between the weights of the others. Nevertheless, it is not uncommon to have the weight of the middle-man nearly equal that of either partner; and on less common occasions, the weight of all three may be similar.

The writer has intentionally presented some photographs in this chapter that show girls in all three capacities: understander, middle-man, and top-mounter. This substantiates the fact that precise timing between individuals and the sensitivity to a well balanced position which necessitates instantaneous corrections for improper balance more than compensates for any unusual strength on the part of the performers.

PART I -- ELEMENTARY STUNTS

1. Lean (Figure 57) Starting Position: "B" sits on "A's" shoulders.
Out and
Lever "C" stands in front of "A."

Execution: "A" grasps "C's" hips as the latter places her left foot on "A's" left thigh. "B" is assisted upward so that she is standing with both feet on "A's" thighs. "B" places her feet high and between "C's" thighs and points her toes outward to gain a secure support. "B" proceeds to lean backward until she is parallel to the floor. As she does this, "C" leans farther forward, and when the balance feels secure, "A" releases her grasp on "C's" hips and places her hands to the side as shown in Figure 57.

2. Two (Figure 58) Starting Position: This is a variation of the High Thigh Shoulder Balance Knee Shoulder Balance shown in Figure 8. "A" lies on her

back with the feet and knees about ten inches apart, and the lower legs nearly perpendicular to the floor. "C" stands astride "A" and faces towards her knees. "C" squats and leans back until her back rests on "A's" hands. She then places her feet on "A's" knees and



FIGURE 57

Lean Out and Lever



FIGURE 58

Two High Thigh Shoulder Balance

and raises her thighs until she is parallel to the floor. "B" stands facing the two partners and in front of their knees.

Execution: "B" places her hands on "C's" thighs and each foot on "C's" feet; then she kneels on "A's" knees. She leans forward until her shoulders are in "C's" hands. Her hands move forward several inches on "C's" thighs, and she presses into the shoulder balance.

3. Stand on Shoulders and Lean Out (Figures 59 and 60) Starting Position: "B" stands on "A's" shoulders and leans forward slightly to grasp the hands of "C." "C" stands in front of "A," raises her arms upward to be grasped by "B," and places the right foot on "A's" thighs. "A" stands straight although the knees are slightly bent. She grasps "C's" hips.

Execution: "B" lifts "C" upward with her hands as "A" assists by lifting "C's" hips. "C" places her left foot on "A's" left thigh. "B" reaches diagonally with her right hand and grasps "C" wrist to



FIGURE 59

Starting Position: Stand on the
Shoulders and Lean Out



FIGURE 60

Stand on Shoulders and Lean Out

wrist. In the meantime, "A's" hands have moved down to grasp "C's" knees. "C" leans forward, and "B" leans backward as shown in Figure 60. If the balance is secure, "A" may release her grasp on "C's" knees. At the conclusion of the stunt a signal is given, and both "B" and "C" release their grasps simultaneously and jump to the floor.

4. Double Mongolian (Figures 61 and 62) Starting position: "A" lies on her back with her legs several inches apart and perpendicular to the floor. "C" stands near "A's" shoulders but faces in the opposite direction. "A" moves her feet backward until they are placed on "C's" buttocks; then she grasps the soles of "C's" feet. "C" sits, and "A" brings her feet back to the original position. "B" stands near "A's" shoulders and faces "C." They grasp each other high on the arms.

Execution: On a signal, "B" jumps high and slightly forward to sit on "C's" thighs. As they lean back, they allow their grasp to



FIGURE 61

Preparing to Lean Out in
Double Mongolian



FIGURE 62

Double Mongolian

slide down each other's arms as shown in Figure 61. Eventually they are parallel to the floor and release their grasp. If the balance is secure, "A" may release her grasp on "C's" feet as shown in Figure 62. In dismounting, "B" and "C" grasp each other's hands and slowly sit up. "A" then moves her legs either forward or backward to permit "C" to stand on the floor and assist "B" to a standing position.

5. Shoulder Balance Variation of Double Mongolian (Figure 63) Starting Position: "A" lies on her back with the legs several inches apart and perpendicular to the floor. "C" sits on "A's" feet while the latter holds the soles of her feet as described in the Double Mongolian. "B" stands near "A's" shoulders and faces "C."

Execution: "B" grasps "C's" ankles as the latter lies back to a position parallel to the floor. "B" places her shoulders on "C's" thighs and kicks into a shoulder balance. "A" may release her grasp on



FIGURE 63

Shoulder Balance Variation of
Double Mongolian



FIGURE 64

Starting Position: Trap Around

"C's" feet whenever the balance is secure as shown in Figure 63.

6. Wrap (Figures 64 and 65) This is a variation of the Front Pull Up Around

on the Knees shown in Figures 48, 49, and 50. "B" lies on her stomach. "A" lies across "B's" back and perpendicular to her so that "A's" feet and knees are about ten inches apart and the feet as close to the buttocks as possible. "B" grasps her own ankles firmly by reaching across "A's" stomach. "C" grasps "A" hand to hand and steps forward on the latter's knees.

Execution: "C" pulls the two partners up in the same manner described in the Front Pull Up on the Knees, and the completed stunt is shown in Figure 65. In dismounting, "A" straightens up and allows "C" to step off the knees; then "A" holds "B" around the waist with the left hand as the latter releases the grasp of her ankles.



FIGURE 65

Wrap Around



FIGURE 66

Front Swan From Arch Back on Feet

7. Front Swan from Arch Back on the Feet (Figure 66) Starting Position: "A" lies on his back with the legs straight and slightly apart, and at an angle of about eighty degrees with the floor. "C" stands two feet in front of "A's" buttocks and faces away from him. He leans back so that his back will be supported by "A's" feet. "B" stands near and in front of "C."

Execution: "C" grasps "B's" hands and assists her in standing on his thighs. "C" then grasps "B's" hips, and "B" springs upward and forward and arches the back while "C" locks his arms straight overhead as shown in Figure 66.

8. Front Swan from Arch Back on the Hands (Figure 67) Starting Position: "A" lies on his back and locks the arms out directly overhead. "C" stands about three feet away from "A's" shoulders and faces in the other direction. "C" leans back until his back rests in "A's" hands.



FIGURE 67



FIGURE 68

Front Swan from Arch Back on Hands Starting Position: Three High Sitting on Shoulders

"B" stands directly in front of "C" and faces him.

Execution: "C" grasps "B's" hands and assists the latter to a standing position on his knees. "C" then grasps "B's" hips, and the latter leans forward and arches the back while "C" presses his arms out straight as shown in Figure 67.

PART II -- INTERMEDIATE STUNTS

1. Three (Figures 68 and 69) "B" sits on "C's" shoulders, and "A" High Sitting on Shoulders stands directly behind them.

Execution: Figure 68 shows how "A" squats low in a deep knee bend behind his partners. He places his head high and between the legs of "C," and places his hands on his knees to assist the raising of the trunk. As he straightens his legs he attempts to keep the back as erect as possible. When he is nearly in an upright position, the hands are no



FIGURE 69



FIGURE 70

Three High Sitting on Shoulders

Starting Position: Three Airplanes

longer needed on his knees; therefore, they held the knees of "C." Throughout the entire movement "B" holds on tightly to "C" with the thighs, and as soon as it is possible, "C" does the same to "A." Figure 69 shows the finished position.

2. Three (Figures 70 and 71) Starting Position: Three High Sitting Airplanes on Shoulders.

Execution: "A" bends his knees slightly, and "C" places his feet on the former's thighs. "B" then places her feet on "C's" thighs and straightens her legs. She leans forward in order that "C" may withdraw his head as shown in Figure 70. "C" holds "B's" knees during the entire movement. "C" then straightens his legs and leans forward slightly to allow "A" to remove his head from between "C's" legs. At the conclusion of the stunt "B" stands on "C's" thighs, and "C" stands on "A's" thighs. If the balance is secure, both "A" and "C" may hold



FIGURE 71

Three Airplanes



FIGURE 72

One Hand Swan From
Three Airplanes

with one hand as shown in Figure 71.

3. One Hand Swan from Three Airplanes (Figure 72) This is an example of one of many stunts that may evolve out of the Three Airplanes. Starting Position: Three Airplanes.

Execution: "C" places his right hand in the lumbar region of "B's" back and his left hand grasps her left ankle. On a signal, "B" springs upward and slightly backward, and then arches the back. Coordinated with that movement, "C" forcefully straightens his right arm overhead while the left arm assists by lifting "B's" left ankle. If the balance feels secure, "C" releases the grasp he holds with the left hand as shown in Figure 72.

4. Double Swan on the Feet (Figures 73 and 74) Starting Position: "A" lies on his back with the legs about twelve inches apart. The left leg is about eighty degrees from the floor, and the right leg is bent.



Starting Position: Double Swan on the Feet



FIGURE 74

Double Swan on the Feet

"C" stands about eighteen inches away from "A's" right hip and faces away from that hip. "C" sits on "A's" right foot and leans back to allow "A's" left foot to support his back near the scapulae. "B" stands directly in front of "C."

Execution: "C" grasps "B" hand to hand to assist the latter in standing on his thighs. "C" then grasps "B's" hips as shown in Figure 73, and as the latter leans forward to arch her back, "C" straightens his arms overhead to be the support for the front swan position. "C" cautiously pushes off the floor with his feet and leans back.

Simultaneously, "A" moves his legs towards the left and extends them until they are straight overhead as shown in Figure 74.

**5. Neck
Lever with
a Lean Out
on Shoulders**

(Figure 75) **Starting Position:** "A" stands with "B" sitting on his shoulders. "C" stands facing them.

Execution: "A" squats slightly and grasps "B's" ankles



FIGURE 75

Neck Lever with a Lean Out on Shoulders



FIGURE 76

Starting Position: Back to Back Swan

which have been extended forward. "C" places his head high and between "A's" thighs. "C" then moves his arms backward and upward until they grasp "B's" ankles. "B" slowly leans back, and "C" brings his hips high until his feet are off the floor. He then extends his legs at a forty five degree angle. When the balance is secure, "A" may release his grasp on "B's" ankles and place his hands to the side as shown in Figure 75.

PART III -- ADVANCED STUNTS

1. Back to Back Swan (Figures 76, 77, and 78) Starting Position: "C" stands directly in front of "A." As "A" squats and places his head between "A's" legs, the latter leans backward until his back rests entirely on "A's" back. "A" places his hands on his knees, and he and "C" interlock arms near the elbow. "B" stands near "C's" right shoulder, grasps his right ankle which has been extended overhead, and places her right foot on "A's" right thigh as shown in Figure 76.

Execution: On a signal, "C" forcefully moves his right leg forward to assist "B" in mounting to a standing position on his stomach. "B" steps off her right foot and then places the left foot on "C's" stomach as she grasps his left foot. She now uses both of "C's" feet for support as she stands on his stomach as shown in Figure 77.

"B" leans forward as "C" bends his knees to facilitate the placement of his feet on "B's" buttocks. When this position feels secure, "B" leans back and "C" extends his legs upward as shown in Figure 78. To dismount, "B" grasps her ankles and commences to sit up.

"C" then allows his legs to go forward to the floor as gently as possible. When they near the floor, "B" jumps off. Throughout the entire stunt, "A" must remain as steady as his legs will permit.

2. Turn (Figures 79, 80, 81, 82, 83, and 84) Starting Position: "A" around

faces upward and keeps his body parallel to the floor while supporting himself on his hands and feet. "C" holds a similar position except that his feet are on "A's" thighs, and his hands rest on "A's" shoulders. "B" uses "C" for her support as she holds the same position as shown in Figure 79.

Execution: All three performers shift their weight to the left in order that the right leg of each one may extend forward as shown in Figure 80. The legs then return to the starting position. "A" lowers his left knee to the floor, "C" keeps most of his weight on his hands and right leg as he moves his left foot high on "A's" left thigh. "B"



FIGURE 77

Intermediate Position: Back to Back Swan



FIGURE 78

Back to Back Swan



FIGURE 79

Starting Position: Turn Around



FIGURE 80

Leg Extension: Turn Around



FIGURE 81

Third Position: Turn Around



FIGURE 82

Fourth Position: Turn Around

places her left foot on "C's" left thigh and pivots on that foot as she leans forward and begins to turn towards the left as shown in Figure 81. "C" keeps most of his weight on his left foot to allow "A" to bring his right hand over and across his body to place it on the floor as shown in Figure 82. As "A" is turning, "C" places his right hand on the former's right shoulder and changes his left hand to "A's" left shoulder. "B" is also turning and places her right hand on "C's" right shoulder and both knees on his back. When they complete turning around, they appear as in Figure 83. "A" is kneeling on his hands and knees on the floor, "C" is kneeling on his back, and "B" is kneeling on "C's" back. Figure 84 shows how "B" has moved forward to take a sitting position on "C's" shoulders, and "C" has moved forward to sit on "A's" shoulders. The latter brings one foot forward and then the other until he is in a squat position with both partners on his shoulders. He finishes the stunt by



FIGURE 83

Final Position: Turn Around



FIGURE 84

Pressing Into a Three High Sitting Position from a Turn Around

standing up to a Three High Sitting on Shoulders.

3. Low
Shoulder to
Shoulder
Balance; Hand
Balance on
Feet

(Figure 85) Starting Position: "A" holds "B" in a Low

Shoulder to Shoulder balance as described on page 16.

"C" stands near "A's" legs and faces away from him.

Execution: "A" raises his legs until they are vertical

and about shoulder-width apart. "C" grasps the soles of "A" and presses into a hand balance.

A variation of this stunt is for "A" to hold the shoulder balance but to grasp "A's" ankles for additional support. "C" will then press into the hand balance while facing the two partners.

4. Hand
Balance on
Back from
a Lean Out
on the Knees

(Figure 86) Starting Position: "A" stands with "B"

sitting on his shoulders. "B" stands on "A's" thighs as

described on page 50. She places her hands on the knees

for support, and bends forward until the back is parallel to the floor.



FIGURE 85

Low Shoulder to Shoulder Balance
Hand Balance on Feet



FIGURE 86

Hand Balance on Back from a
Lean Out on the Knees

"C" faces both partners while standing on the floor near "A's" right side.

Execution: "C" places his hands on "B's" back and his left foot on "A's" thigh above "B's" right heel. As he slowly presses into a hand balance, his additional weight is counteracted by "A" leaning farther back. After "C" is in the hand balance position, "B" may place her hands to the side as shown in Figure 86.

5. Back Support; (Figure 87) Starting Position: "A" lies on his back with the feet on the floor. "C" braces her feet on "A's" knees and her back on "A's" hands as described on page 43.

"B" stands near "A's" shoulders and grasps "C" hand to hand.

Execution: "B" presses into a hand balance.

6. "Swoop Up" to a Three High Standing Position (Figures 88, 89, and 90) Starting Position: "A" holds "C" standing on his shoulders. "A's" legs are a comfort-



FIGURE 87



FIGURE 88

Back Support; Hand to Hand Balance Starting Position: "Swoop Up" to a Three High Standing Position

able distance apart; and although his knees are slightly bent, his trunk is erect. He grasps the upper part of "C's" right calf with his left hand, and he cups his left hand and places it on his left thigh. "B" stands in front of his left leg and places her left foot in his left hand. She crosses her arms in order to grasp "C" hand to hand. "C" has also crossed his arms as shown in Figure 88.

Execution: On a signal, the three performers do the following movements simultaneously. As "C" straightens his legs and pulls his arms upward, "B" springs up from "A's" hand, and "A" follows through by pushing his left hand upward as shown in Figure 89. "B" continues upward until she is either kneeling or standing on "C's" shoulders. As soon as she leaves "A's" left hand, he immediately uses that hand to grasp the upper part of "C's" left calf. "B" stands on "C's" shoulders, releases her hand to hand grasp with him, and he grasps her high on both



FIGURE 89

Intermediate Position: "Scoop Up" to Three High Standing Position



FIGURE 90

Three High Standing Position

calves as shown in Figure 90. In dismounting from this position, "B" grasps "C's" hands and sits on his shoulders. "C" grasps "A's" hands and sits on his shoulders. The performers then either do a Three Airplanes, or "A" squats and allows "C" to step off on to the floor.

Before attempting this stunt, the performers should mount to a three high standing position from a three high sitting position as shown in Figure 69. "C" will stand on "A's" shoulders as shown in Figure 20, and "B" will mount "C's" shoulders the same way. In all instances in which three high positions are learned, several spotters must be used.

7. Pitch (Figure 91) Starting Position: "B" and "A" stand facing to a High Front Swan each other about six feet apart. "C" is about six feet in back of "A."

Execution: "B" runs in towards "A" and places both hands on his shoulders and the left foot in his hands as shown in Figure 25. "B" hops off the right foot, quickly extends the left leg, and pushes off his shoulders. Immediately after "B" steps into his hands, "A" pushes his hands overhead and backward to pitch "B" into a front swan in the waiting hands of "C" as shown in Figure 91.



FIGURE 91

Pitch to a High Front Swan

CHAIR

Chair

Chair

After a person has learned to hold head balances, levers, and other acrobatic positions on the floor, he may then begin to practice these stunts on chairs, tables, gymnastic equipment, and many other objects. Inasmuch as chairs are commonplace and provide convenient space for practicing, they are suggested for challenging stunts. A table is frequently used here to give chairs to give more appeal to the presentation.

1. Chair -- Diagram 1

1. Chair (Diagram 1) Nearly any straight-backed chair may be used. In attempting some stunts, however, it is imperative that the chairs be identical in order that each of the leg tips will coincide. Diagram 1 explains how this type of chair may be constructed. Rubber tips are frequently placed on the tips to lessen the danger of the chairs slipping.

2. Table (Diagram 2) Any sturdy table will suffice.

3. Blocks Scooter blocks two inches, by four inches, by eight inches are adequate. They should be well planed and sanded so that each block fits evenly on top of the other. If the blocks are painted in alternate colors, they will give a more attractive appearance.

4. Revolving (Diagram 3) This apparatus may be made from a small Swivel

table and a discarded piano stool swivel. A metal cross piece about twenty inches long is attached to the top of the swivel, and a small, wooden block two inches, by four inches, by four inches

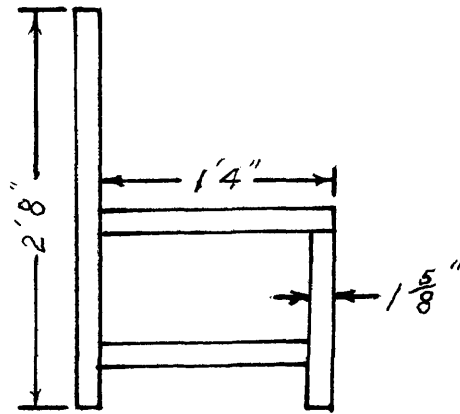


DIAGRAM 1

Balancing Chair

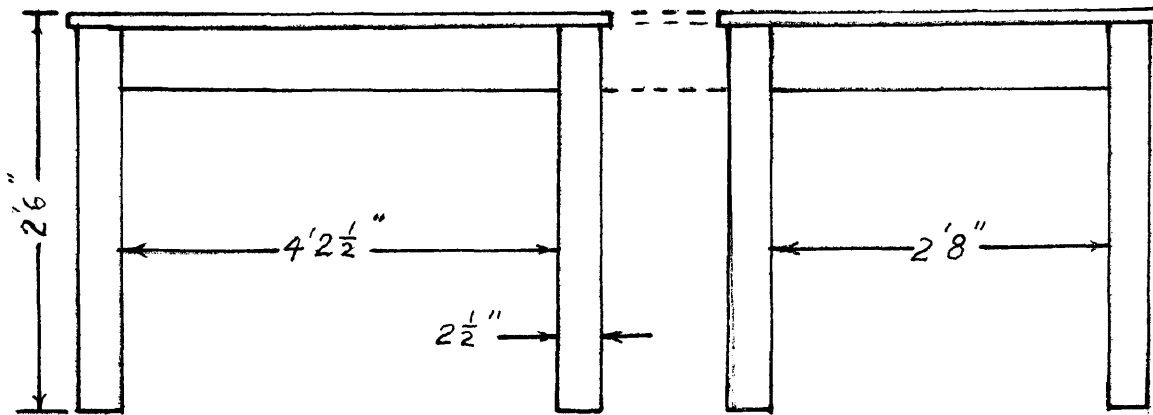


DIAGRAM 2

(A) Front View of Table

(B) Side View of Table

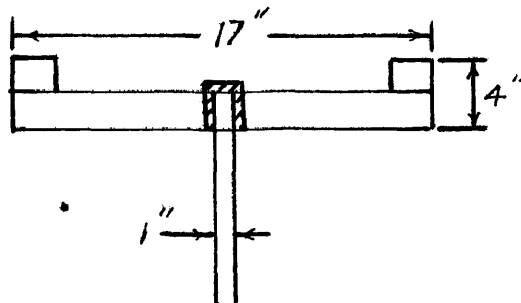


DIAGRAM 3

Revolving Swivel

is attached to each end of the cross piece to provide a comfortable grip for the performer.

5. Bottles Any standard soft drink bottles are satisfactory.

PART II -- INDIVIDUAL STUNTS

1. Two Leg Chair Balance (Figure 92) Starting Position: The performer sits on the chair, and holds on to the front of the seat.

Execution: He leans back in the chair until the front legs rise several inches off the table. He extends his legs outward and diagonally and moves them up and down whenever they are necessary to maintain his equilibrium. Should he fall backwards; he grasps the front of the seat, and places his feet on the floor behind him as he withdraws the chair.



FIGURE 92

Two Leg Chair Balance



FIGURE 93

Starting Position: Hand Balance on One Chair

2. Hand Balance on One Chair (Figures 93 and 94) Starting Position: The performer sits on the chair sideways, and grasps the edge of the seat with his left hand. The right hand grasps the top of the back, and the

feet point straight ahead as shown in Figure 93.

Execution: He tucks his legs tightly so that the knees nearly touch the chest. He then leans slightly forward, keeping the left arm nearly straight at all times, and slowly presses into the completed hand balance position as shown in Figure 94.

3. Hand Balance on Two Chairs (Figure 95) Starting Position: This stunt requires the identical movements of the last stunt described, but a more delicate sense of balance is involved. The first chair is set upright on the table, and the seat of the second chair rests on the seat of the first chair. The tips of the third chair coincide with the tips of the second chair.

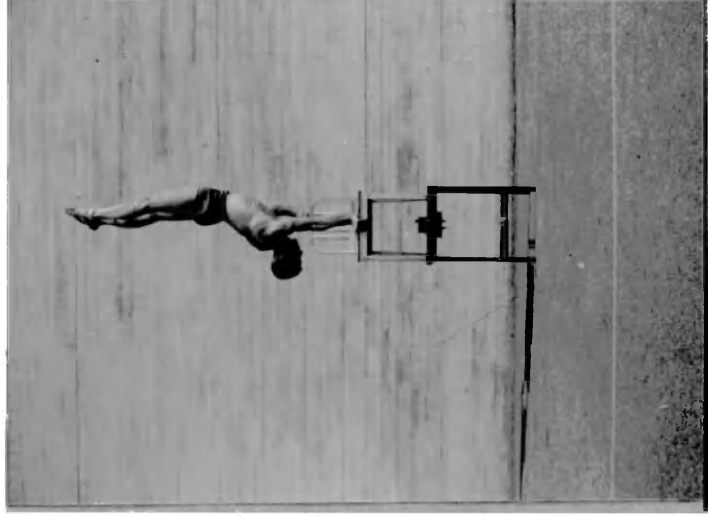


FIGURE 94

Hand Balance on one Chair

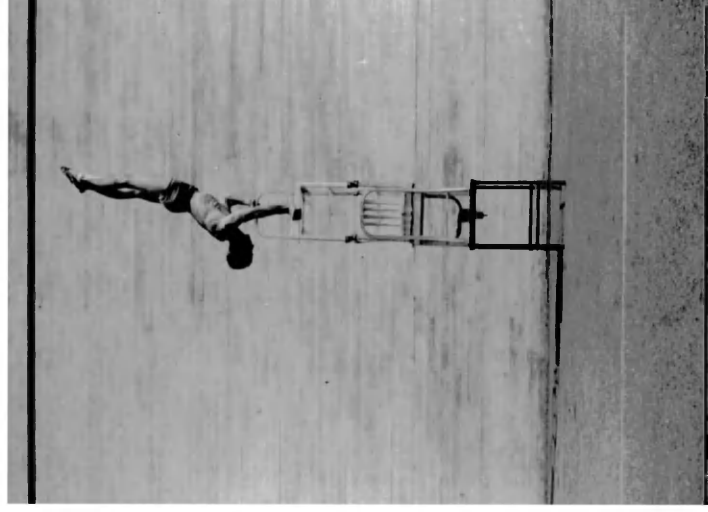


FIGURE 95

Hand Balance on One Chair Resting
on Two Chairs

Execution: An assistant holds the column of chairs while the performer climbs to the top chair and sits. He grasps the front of the seat with his left hand and the top of the back with the right hand. He then presses the hand balance as shown in Figure 95.

It is important to stress two safety rules for performers attempting this type of balancing. (1) It is recommended that a slight underbalance be maintained at all times during hand balances. Balancing on chairs is much different from balancing on the floor. If one has overbalanced while doing a hand balance on the floor, he may take a step forward to regain his balance. If overbalancing occurs while doing a hand balance on chairs, a step may not be taken, and the chairs may fall and cause an injury to the performer. (2) The performer should always dismount from a chair as slowly as he pressed into the hand balance.

4. Hand Balance on Backs of Two Chairs; One Supported (Figure 96) Starting Position: A partner sits on one chair to provide steadiness for that chair. The performer places the back of a second chair about two feet away from the back of the first chair and grasps the tops of both backs.

Execution: He slowly presses into the hand balance, and keeps most of his weight on the chair that supports the partner as shown in Figure 96.

5. Hand Balance on Backs of Two Chairs (Figure 97) Starting Position: Two chairs are placed about two feet apart with the backs facing each other. The performer stands between them and grasps the tops of both backs.

Execution: He presses into the hand balance carefully, being certain to push outward on the backs at all times. Without this

technique, the chairs have a tendency to collapse towards the center.

6. Hand Balance on Two Chairs; Step Fashion (Figure 98) Starting Position: The base chair rests on the table, and the rear leg of the top chair are placed on the forward edge of the seat of the base chair. The performer grasps the top of both back and tries to keep most of his weight on the base chair, although there must be sufficient weight on the top chair to prevent the base chair from falling.

Execution: The left arm is kept quite straight as the performer presses into the hand balance. The right hand tries to keep the top chair in an upright position.

A variation of this stunt is to have a partner sit on the top chair.

7. "The Pause That Refreshes" (Figure 99) Starting Position: This is the same stunt shown in Figure 94 except that the chair tips rest on



FIGURE 96



FIG 97

Hand Balance on Backs of Two Chairs; Hand Balance on Backs of Two Chairs
One Supported

bottles instead of the floor. After the performer places the legs on the bottles, he mounts to a kneeling position on the chair. Before he continues, he makes certain that the chair has been well placed on the bottles. This precaution is taken by jostling the chair back and forth.

Execution: If the bottles do not fall after the above treatment, the performer can be assured that it is safe to attempt the hand balance. He must be extremely cautious in this maneuver and hold a slight underbalance during the finished hand balance as shown in Figure 99. Two spotters should squat low beneath the performer's head when this stunt is learned.

6. Three Bottle (Figure 100) Starting Position: The base chair rests on four bottles, and the top chair is placed step fashion as described on page 66. It would be easier to do this stunt

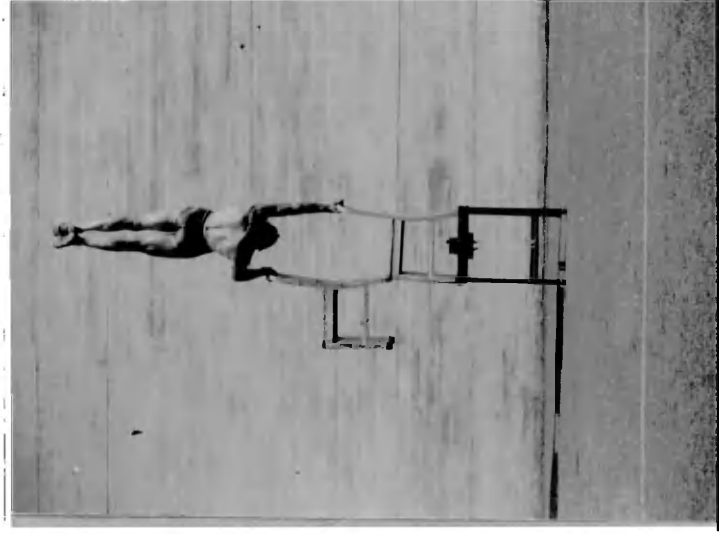


FIGURE 98

**Hand Balance on Two Chairs;
Step Fashion**



FIGURE 99

"The Pause That Refreshes"

if one of the bottle tops were filed off one quarter of an inch shorter than the others. This short bottle may be placed in any of the four positions of the legs depending upon the desire of the performer.

Execution: He places his left hand on the edge of the seat, and his right hand grasps the top of the back. If the short bottle is placed under the right front leg, the performer must shift most of his weight to the heel of the left hand to keep the weight from being on the short bottle. After the weight has been shifted, a partner may remove that bottle, and the performer continues to hold the hand balance as shown in Figure 100. This stunt may also be started with the chair supported on three bottles. The performer must always keep his weight away from the unsupported leg. He must always dismount cautiously!

9. Removing (Figures 101, 102, and 103) **Starting Position:** Four
Blocks While
in a Hand wooden blocks are placed on top of each other in two equal
Balance

FIGURE 100

Three Bottle "Pause"; Step Fashion

FIGURE 101

Starting Position: Hand Balance
 on Blocks

columns. The performer stands on the table and places his hands on the top blocks which are approximately shoulder-width apart. He kicks into a hand balance as shown in Figure 101.

Execution: Deftly, he shifts his weight to the left arm which must remain straight. If the blocks are no wider than shoulder-width apart, the balance will be relatively easy to maintain since the weight will not have to shift far in a lateral direction. After the weight shifts to the left, Figure 102 shows how the performer lifts the top block beneath the right hand and discards it to the side.

Figure 103 shows the next sequence in which the weight shifts over to the right arm which is kept straight. The left hand picks up the top block and discards it to the side. The blocks must be picked up before tossing them to the side. If they are pushed off to the side, they will dislodge the blocks beneath them, and each succeeding



FIGURE 102

Removing the Right Block



FIGURE 103

Removing the Left Block

balance will be more difficult to hold.

10. One Hand Lever on Backs of Two Chairs (Figure 104) Starting Position: The performer places two chairs on the floor so that their backs touch each other.

Execution: He places his right hand on the edge of the right chair, and grasps the tops of both backs. After kicking into a hand balance, he allows his weight to descend slowly to the left until his left hip rests on the left elbow which has been bent. Then the body is parallel to the floor, little weight remains on the right arm; therefore, it is lifted as shown in Figure 104.

11. Removing Blocks While in a One Hand Lever (Figure 105) Starting Position: The performer places four blocks on top of each other in two parallel columns as described on pages 68 and 69.

Execution: He kicks into a hand balance which is held momentar-



FIGURE 104

One Hand Lever on Backs of Two Chairs



FIGURE 105

Removing Blocks While in a
One Hand Lever

ily. Then he bends his left arm and allows his weight to descend to the left until his hip rests on the left elbow. Then the weight is evenly distributed over the elbow, he places his right arm to the side as shown in Figure 105. He picks up the top right block and discards it. The right hand returns to the new top block and braces itself and the forearm to receive the weight of the body as it begins to shift to that arm. The body moves counter-clockwise until the lever is held on the right elbow. The left top block is discarded, and the alternating levers continue until all blocks have been removed.

12. Rotating (Figure 106) Starting Position: The performer uses a Hand Balance swivel of the type shown in Diagram 3. He carefully presses into a hand balance as shown in Figure 106.

Execution: Then the performer desires to rotate, he shifts his weight to the left and jerks the right hand in a clockwise direction to



FIGURE 106

Rotating Hand Balance



FIGURE 107

Hand Balance; Sit on Neck

move the cross piece. This is done gradually until a complete revolution has been made. If a ratchet is attached to the swivel, there will be less lost motion, and the stunt can be done with less effort.

The same rotation may be made while the performer holds a one hand lever. In this stunt, the free hand moves quickly in the direction of movement to provide the necessary momentum.

PART III -- PARTNER STUNTS

1. Hand Balance (Figure 107) Starting Position: Once this stunt has been learned on the floor, a table should be used as the base for the best effect. The understander places his hands on the floor, the buttocks high, and the weight on his hands and the balls of his feet. The top-mounter faces away from the partner and sits on his neck. She encircles her arms around his chest and clasps her hands together.

As the top-mounter tightens her grasp and slowly raises her legs to a "V" position, the understander leans forward slightly and lifts



FIGURE 108

Double Lever on One Chair

his legs until they form a line of about forty five degrees with the floor.

2. Double (Figure 108) Starting Position: One chair is placed on a lever on one chair table. The understander stands on the table and places his left hand on the top of the back and his right hand on the front edge of the seat. The top-mounter stands on the chair and sits high on his partner's back. The upper surface of his feet are placed between the thighs of the understander.

Execution: The top-mounter leans back and tries to lift the legs of the understander. The latter tries to lift his legs and raise his head while leaning slightly forward with straight arms. At the conclusion of the stunt both performers should be parallel to the floor as shown in Figure 108.

3. Break- (Figures 109 and 110) Four chairs are arranged in step- away on four chairs fashion as shown in Figure 109. The base chair rests on the floor. The rear legs of the second chair rest on the front edge of the base chair. The front legs of the second chair rest on the front edge of another base chair that faces inward. The rear legs of the third chair rest on the front edge of the second chair. The lower performer stands on the seat of the first base chair and grasps the tops of the back of that chair and the second chair. The higher performer climbs to a standing position on the seat of the second chair and places the third chair in position.

Execution: The lower performer presses into a hand balance, and the partner does the same stunt. Finally, both are in perfect balance although the weight is mostly to the right of center. When the higher performer is ready, he says, "Ready---now." This is the

signal for both performers to shift their weight farther to their left. This will permit the front legs of the second chair to rise from the seat of the second base chair. The second base chair has been removed by a third person in Figure 110. After the hand balance is held for several seconds, the performers dismount cautiously in back of their chairs.

For the most effective presentation, this stunt should be done on a table. The front legs of the second base chair should rest on the edge of the table while the rear legs are suspended in mid-air. When the performers shift their weight to the left, the second base chair will automatically fall to the floor.



FIGURE 109

Preparing for the Break-away



FIGURE 110

Break-away on Four Chairs

CHAPTER V

COMEDY

"Clowning is probably the most unsophisticated and elementary form of divertissement there is. It is frankly nonsensical in nature and depends upon sham and exaggeration for substance."²⁵

Every school has those individuals who are adept in giving an audience pleasurable moments by causing them to laugh. Rather than to stifle such an asset, there should be opportunities in which this asset may be presented to the enjoyment of all.

It frequently seems that the art of being a buffoon is almost innate. One clown will use little effort in making his audience laugh, while another clown tries strenuously to produce mirth but receives nothing but disapproval. A clown is a person to be selected cautiously; an improper selection will cause a very unfavorable reaction.

The clothes a clown wears are important, and so is his make-up. The ability to time his stunts, and not to overdo them, are prerequisites. In most instances he should take a simple task and make it look extremely difficult; thereby making the task appear ridiculous.

PART I -- COMEDY STUNTS USING THE HORIZONTAL BAR

1. Double Hip Circles (Figures 111 and 112) Starting Position: The first performer pulls up to a front leaning rest position on the bar. His partner grasps the bar inside the former's hands, and pulls

²⁵. Leslie L. Judd, "Here Come the Clowns," Scholastic Canon, 8:7:6, March, 1939.

his legs over the bar until they lock behind the first performer's back.

Execution: Following a slight rocking motion forward and backward, the first performer finally falls forward from the position shown in Figure 111. The second performer then comes to the top as shown in Figure 112. Any number of these circles may be attempted.

Added humor can be presented by having one of the performers take a small broom from his pocket and dust off the pants of his partner.

2. Round This stunt, though not shown in a photograph, may be clearly 'a Round described in a verbal manner. **Starting Position:** The performer stands near the vertical upright of the horizontal bar.

Execution: He jumps up high and with a slight forward motion to grasp the vertical support. This momentum causes him to rotate around the bar in a circular, descending motion as he gradually releases his grasp. After one revolution, he nonchalantly steps off on



FIGURE 111

Starting Double Hip Circles



FIGURE 112

First Rotation; Double Hip Circles

to the floor.

PART II -- COMEDY STUNTS USING THE PARALLEL BARS

1. Leg Itch (Figure 113) Starting Position: The performer holds a hand balance on the bars.

Execution: He leisurely scratches the leg farthest from the audience with the other foot.

2. Double Lever (Figures 114 and 115) Starting Position: The understander kneels on the bars with his hands and knees. The top-mounter sits on the former's neck, though he keeps most of his weight on his own feet as shown in Figure 114.

Execution: The top-mounter places his feet inside the partner's thighs and tries to lift his legs as he leans back. Eventually, the understander's feet will leave the bar as shown in Figure 115. The



FIGURE 113

Leg Itch



FIGURE 114

Starting Position: Double Lever

climax of the stunt is for both performers to be parallel to the floor. Figure 115 shows the approximation of that position.

3. Chin (Figure 116; 1) Starting Position: The performer stands at Fall the side of the bars away from the audience.

Execution: He walks towards the bars fast, and just before his chin hits the bar, he kicks one foot up in front of him. He quickly places his hands near his hips to protect himself. As he falls on his back, most of his weight is taken on the hands. A drum beat or loud



FIGURE 115

Double Lever

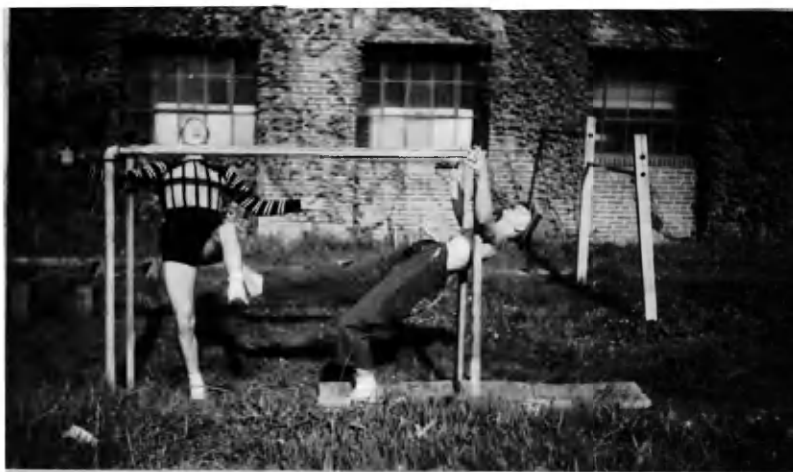


FIGURE 116

Chin Fall; Big Shoulders

noise made from the cracking of two wooden blocks together, when done simultaneously with the contact of the bars, will make the fall more realistic.

4. Kip (Figure 116; r) Starting Position: The appropriate time for Shoulders this stunt to be done is immediately following the good mount of another performer. The braggadocio type clown then gives the impression that he can duplicate the mount with ease. He stands several feet away from the end of the bars and walks quickly towards them.

Execution: He intentionally keeps his shoulders and arms too far apart. This causes him to collide with the bars as shown in Figure 116; r. He immediately falls to the mat and protects himself with his hands as described in the "Chin Fall."

5. Fall (Figure 117; l) Starting Position: The performer holds a Through straddle rest position above the bars.

Execution: He releases his grasp, relaxes his legs, and falls backward. His hands take most of the weight as he hits the mat.

6. Lazy (Figure 117; r) Starting Position: This is another Man's Kip excellent stunt to follow a smooth appearing mount. The



FIGURE 117

Fall Through; Lazy Man's Kip

clown stands close to the ends of the bars.

Execution: after he grasps the ends of the bars, he jumps backward and up in the air. as he comes forward, he braces his feet against the uprights as shown in Figure 117; r. He then pulls himself upward and extends his legs until he reaches the desired support position above the bars.

7. Seat (Figure 118) **Starting Position:** Instead of falling completely to Seat to the floor during the Fall Through stunt previously described, the performer retains his grasp on the bars and brings his legs overhead.

Execution: His partner enters in a carefree manner from the opposite direction and jumps to an upper arm hang on the bars. He makes it appear as though most of his weight were on the first person's buttocks. He takes a newspaper from his pocket and reads it as shown in Figure 118.

8. Kick (Figure 119) **Starting Position:** One performer loses his Through hat at the end of the bars while doing a routine. As he begins to pick it up, the clown jumps to an upper arm hang in the middle



FIGURE 118

Seat to Seat

of the bars.

Execution: The clown immediately does a back shoulder roll. As he reaches the downward part of the roll, he relaxes his firm grasp on the bars to allow the momentum to carry him forward. This motion allows him to kick the partner in the seat as shown in Figure 119. The partner falls forward on his chest. This stunt calls for perfect timing, and the wearing of a long sleeved shirt to permit sliding along the bars with a minimum of friction helps acquire the timing.

9. Back Shoulder Roll; Slide **Starting Position:** A variation of the Kick Through is to have the clown do a fast, extended back shoulder roll in the middle of the bars.

Execution: Near the completion of the roll, he releases his grasp, and the momentum will cause him to slide the remaining distance of the bars on his upper arms and eventually fall off the ends of the bar on to the floor. Again, it is essential that the performer wear a long sleeved shirt.

10. Hook Swing Fall (Figure 120; l and r) **Starting Position:** This stunt is best presented after a "straight" performer has demonstrated



FIGURE 119

Kick Through

the correct way of doing a hook swing dismount. (This is done by the performer standing behind the bars and grasping the near bar with both hands. He jumps up and hooks his knees on the far bar. He then pulls up until his chest touches the near bar. He releases his grasp and maintains an arch in his back until the body swings down and then up to a horizontal position. He then releases his knees and lands on his feet.)

Execution: The clown attempts to duplicate the stunt, but he releases his knees too soon as shown in Figure 120; l which causes him to fall on his chest as shown in Figure 120; r.



FIGURE 120

Hook Swing Fall



FIGURE 121

Head Through The Springs

PART III -- COMEDY STUNTS USING THE TRAMPOLINE

1. Head (Figure 121) Starting Position: The performer stands at Through the Springs the end of the trampoline.

Execution: A hand balance, forward roll is frequently used in mounting the trampoline. If a "straight" performer does this, it is amusing to have a clown attempt the same stunt. The clown holds a momentary hand balance and quickly lowers his head between the springs. He pretends he is in extreme difficulty and kicks vigorously.

2. Step (Figure 122) Starting Position: The performer stands at Through the Springs the end of the trampoline.

Execution: As he attempts to step on to the trampoline, he steps through the springs instead. Figure 122 shows how a partner may offer assistance, but eventually he gets into a similar difficulty himself. One spring is removed for both of these stunts to facilitate getting



FIGURE 122

Step Through the Springs



FIGURE 123

Running in Mid-Air

the head and the legs from between the springs.

3. Running (Figure 123) Starting Position: The clown bounces on the in Mid-air trampoline.

Execution: While bouncing, the clown moves his legs up and down as if he were running as shown in Figure 123. Running in the air while doing a seat drop half twist is also effective.

4. Seat Drop; Wave (Figure 124) Starting Position: The clown does a seat drop.

Execution: While in mid-air, he shakes his shoulders and waves to the audience.

5. Front Dive (Figure 125) Starting Position: The clown bounces high several times.

Execution: Following one of the bounces, he dives head first towards the bed. If he has sufficient height, he can straighten out to a perpendicular position. Just before he hits the canvas, he tucks his



FIGURE 124

Seat Drop; Wave



FIGURE 125

Front Dive

head, lands on his scapulae, and bounces to the feet. This stunt should be learned by using low bounces at first.

6. Back Three Quarter (Figure 126) Starting Position: The performer bounces high several times.

Layout to a Front Drop Execution: He then does a back layout somersault, but lands on his stomach in a front drop position. While in mid-air, he emits a loud scream to portray apprehension. After landing on his stomach, he slowly rises, appears sick, and places his hands to his mouth to discard a handful of teeth (white candy or candy corn).

7. Flea Starting Position: The clowns should be shabbily dressed. Sometime during the routine one should stop and gaze at the bed, then stealthfully squat down to examine the canvas.

Execution: After close observation, one clown finally slaps the canvas as hard as possible as he pretends he has discovered a flea.



FIGURE 126

Back Three Quarter Layout to
a Front Drop



FIGURE 127

Skipping Rope

Backstage an accomplice, or the clown himself, howls in a mournful tone.

8. Skipping (Figure 127) Starting Position: The clown holds a rope Rope in his hand as he bounces.

Execution: He skips in an orthodox manner, and occasionally tries a double or triple jump.

9. Skipping (Figure 128) Starting Position: The clown shortens the Rope; Back Drops rope in his hands as he bounces.

Execution: He holds the rope over his head as he does the back drop. After he bounces up, he pulls the rope over his head and beneath his feet to the original position behind his head by the time his feet land on the bed. As he descends to another back drop, the rope goes over the head and beneath the feet back to the original position again.

10. Double (Figure 129) Starting Position: The two performers jump Seat Drops simultaneously several times.



FIGURE 128

Skipping Rope; Back Drops



FIGURE 129

DoublesSeat Drops

Execution: While the two are jumping high, they grasp each other's arms. One jumps slightly higher than the other in order that he may sit on the lower person's lap as shown in Figure 129. After they strike the bed in this position, they bounce, release their grasp of each other, and continue their routine.

11. Simultaneous Front Drop-Seat Drops (Figure 130) Starting Position: The two clowns jump alternately on the trampoline.

Execution: The first performer gives a signal; then he does a seat drop with his legs spread apart. His partner does a front drop close to him and between his legs. When a profile of this stunt is seen by the audience, it will appear as though the two will collide as shown in Figure 130. In reality, there is ample distance between them.

12. Hand Shake (Figure 131) Starting Position: The performer does a series of back drops.



FIGURE 130

Simultaneous Front Drop-Seat Drops



FIGURE 131

Hand Shake

Execution: After several back drops, the clown tries to regain a standing position but never quite attains his goal. He reaches forward towards his partner at the end of the trampoline as shown in Figure 131, but the latter is unable to give him any assistance until five or six attempts have been made.

13. Kick (Figure 132) Starting Position: Two performers bounce Off until one pretends disgust and commences to dismount from the trampoline.

Execution: As he approaches the end of the trampoline, he bends over to pick up his hat that he dropped during his routine. His partner, meanwhile, does a back drop in the center of the bed. Then he bounces up, instead of landing on his feet, he forcefully kicks the disgusted partner in the seat as shown in Figure 132, and this causes the latter to fall off the trampoline.

14. Straddle (Figure 133) Starting Position: One performer sweeps Vault over Partner the bed of the trampoline while the other partner is bouncing.



FIGURE 132

Kick Off

Execution: The latter jumps high and over the sweeper while in a straddle position as shown in Figure 133. This stunt is most effective when the sweeper can stand erect.



FIGURE 133

Straddle over Partner

CHAPTER VI

THE HUMAN FLY

Walking with the feet while inverted has for many years been called the "Human Fly." The methods used for this acrobatic feat have varied from magnets, to suction cups, to webbed loops such as those described in this chapter. It is an act primarily designed for a person small in stature. Quite often children between the ages of six and ten years can hold themselves in the inverted position in the loops, but adults usually encounter more difficulty.

The purpose of the performer is to walk inverted for a predetermined distance, and then to return to the starting point. Although it is more spectacular when done high in the air, it is suggested to have the loops no higher than fifteen feet above the floor.

PART I -- EQUIPMENT USED

1. The (Figure 134) Any sturdy log would suffice. The accompanying Platform photograph, however, shows a section of two boards about



FIGURE 134

Human Fly Platform and Webbed Loops

fourteen feet long, each of which is two inches thick and four inches wide. The boards have been bolted together every four feet. The platform is attached to a higher permanent structure such as a girder or a running track above the gymnasium floor. It must be fastened securely to prevent any movement.

2. The (Figure 134) Canvas webbed loops about one inch wide and three webbed loops feet long are recommended. These may be purchased in an awning shop or marine supply store. A loop is made from each piece of webbing by sewing the ends securely. The loop is placed over the platform as shown in Figure 134. Additional safety is provided by having wooden or metal braces fastened over the webbing at the sides. The loops should be spaced about fifteen to eighteen inches apart.

PART II -- HUMAN FLY WALKING

1. Talking (Figure 135) Starting Position: The performer stands on Forward the floor and climbs overhead to the platform by means of a rope. When she nears the top, she grasps the rope tightly and places her left instep in the nearest loop, and the right instep in the next loop. She releases her grasp on the rope and flexes her feet as much as possible as shown in Figure 135.

Execution: By bending and extending at the waist in a rhythmic manner, she obtains a swing. The following instructions assume that the performer is starting from the position shown in Figure 135. Just before she reaches the end of the backward swing, she withdraws her right foot from the loop. As she swings forward, she places the right instep in the next succeeding loop. Then, as she swings backward again, the left foot is withdrawn from the loop just prior to the end

of the swing. As she swings forward, she places the left instep in the next loop. This same motion continues until all the loops have been used.

2. Walking (Figure 135) Starting Position: The performer hangs Backward inverted in the loops as shown in Figure 135.

Execution: The walking motion is the opposite of the forward movement. Just before reaching the end of the forward swing, she withdraws her left foot from the loop. As she swings backward, she places the left instep in the next loop. Then, as she swings forward again, the right foot is withdrawn from the loop just prior to the end of the swing. As she swings backward, she places the right instep in the next loop. This same motion continues until she has returned to the starting point.

Spotters should always be beneath the performer even after this



FIGURE 135

The Human Fly

stunt has been learned. It is suggested to have the platform about seven feet from the floor for the beginner in order that the spotters may protect the performer with a minimum of danger. When the platform is this low, it is permissible to allow the performer to practice with but one spotter.

CHAPTER VII

THE IRON JAW

The "Iron Jaw" has been seen in the circus for many years. In this number, a person's weight is suspended by his jaws alone. Inasmuch as the development of a strong jaw is the primary prerequisite for doing the orthodox stunts, there may be some students who can adapt themselves to such an act rather than to one that requires greater control of the large muscle groups. An individual who possesses strong, sound teeth may be able to support his own weight within a period of two months if he practices at least twenty minutes each day.

PART I -- EQUIPMENT USED

1. Mouth- (Figure 136) A harness maker can make a mouthpiece in a piece short time, or it may be purchased from most companies that manufacture bar bells. The leather grip is approximately two inches



FIGURE 136

Iron Jaw Mouthpiece and Trapeze

wide, six inches long, and one half inch thick. One end of the leather is looped around a metal ring and pivoted to prevent the ring from slipping out. Two other pieces of leather are riveted to each side of the main piece of leather on the end that will be inserted in the mouth. Each piece is approximately one quarter of an inch thick and in the shape of the dental arch. This assures a better grip.

It is important for the mouthpiece to be fitted to the individual's mouth. This requires a dental impression, and is done by having the student bite hard on a piece of cardboard. The leather pieces are then made according to this shape.

2. Trapeze (Figure 136) The trapeze consists of a strong, rounded block of wood about twenty seven inches long and two inches in diameter. Two eye bolts pass through the trapeze at both ends. One end of each of two chains attaches to the bolts, and the other end of each chain attaches to the ring in the mouthpiece. The trapeze should be constructed to allow an easy disengagement of the mouthpiece in order that the performer may hang either by his teeth or by his knees while supporting someone with his teeth. For the latter stunt, another small trapeze is required.

3. Swivel For rapidly revolving iron jaw sockets, especially constructed ball bearing swivel is necessary, and this should be purchased from a company specializing in circus equipment. The typical swivel found in the hardware store does not rotate smoothly enough to be used for iron jaw stunts. A professional swivel has an attachment for the iron jaw grip too. (The Appendix lists names and addresses of companies that specialize in this equipment.)

PART II -- INDIVIDUAL IRON JAW STUNTS

1. Weight (Figures 137 and 138) **Starting Position:** Prior to actually **Lifting**

attempting to hold one's own weight by his jaws, he should lift weights in a progressive order. A chain four feet long should be passed through the center of some bar bell weights. Both ends of the chain are connected to the ring which is attached to the leather mouth-piece.

Execution: Approximately twenty five pounds may be placed on the chain at first. This is lifted from a bent body position as shown in Figure 137 and lifted to the straight body position shown in Figure 138. The performer should do this several times, rest, and repeat. A twenty minute workout of this kind should suffice. The weight should be pulled up slowly; otherwise the teeth may be loosened. The weight



FIGURE 137

Bent Body Position



FIGURE 138

Straight Body Position

should be increased periodically and held for longer periods of time until the subject can hold his own body weight for thirty seconds.

2. Hanging (Figures 139, 140, and 141) Starting Position: The grip by the Jaws

may be attached to a trapeze as shown in the photographs, or it may be attached to anything overhead that would support the weight.

Execution: The grip is placed gently in the mouth in such a way that the entire jaw may exert pressure on it. The work is done with the jaw, not merely the teeth. If a trapeze is used, the chain should be held with the hands as shown in Figure 139. After the grip is in the correct position in the mouth, the hands are gradually relaxed to prevent any sudden jerk of the neck muscles and teeth.

When the performer believes he can hold his weight, he places the hands to the side as shown in Figure 140. A close-up of the same



FIGURE 139

Preparing for the Release -



FIGURE 140

Iron Jaw in the Swan Position

position is shown in Figure 141. The body is arched, toes pointed, and arms to the side. When the performer is tired, he re-grasps the chain and lowers himself to the floor.

3. Revolutions Starting Position: A professional ball bearing swivel is required. The performer starts by hanging by his jaws.

Execution: He quickly moves his arms in the direction he wants to turn. He also twists the neck quickly in the same direction, and this causes the entire body to revolve around the swivel. There is much coordination required between the neck and the lower body, and it takes constant practice to perfect the stunt and obtain the desired speed.

Prior to learning the stunt from the iron jaw position, it is advisable to learn the neck and body motions while hanging from a web supported from the swivel to the back of the performer's neck.

4. Iron Jaw Slide Starting Position: A cable should be constructed to extend from one part of the gymnasium to the other side, and at an angle of approximately twenty degrees. The grip is attached to the



FIGURE 141

Close-up of Iron Jaw in Swan Position

cable by means of a small pulley that slides down the cable. The pulley should have two small metal extensions which the performer could grasp if necessary to prevent burning his fingers on the cable.

Execution: When the performer can hold his weight with ease, he may try to hold the iron jaw position while sliding down the cable. This should never be attempted unless an assistant follows him beneath the cable at all times, and the cable should never be attached higher than fifteen feet above the floor.

PART III -- PARTNER STUNTS

1. Sitting (Figure 142) Starting Position: Once a performer is able Position

to hold his own weight safely in the iron jaw position, he may consider doing stunts with a partner. Partner routines may appear to be more difficult than individual routines. In reality,



FIGURE 142

Sitting Position



FIGURE 143

Pike Position

164674

they are easier since the partner may weigh much less than the one who is hanging from the iron jaw position. The performer hangs by his knees from the upper trapeze. His lower legs are entwined around the suspension ropes that connect the ends of the trapeze. Another trapeze is connected to his mouth by the grip, and this is lowered for his partner to grasp as she stands on the floor.

Execution: The performer holds most of the weight in his hands at first. The partner grasps the chains and pulls herself up to a sitting position on the trapeze. The performer releases his hand grasp as shown in Figure 142. When this is being learned, the lower trapeze should be no more than four feet above the floor.

2. Pike (Figure 143) Starting Position: The performer hangs by his Position knees from the upper trapeze and supports the lower trapeze both with his hands and the grip in his mouth.

Execution: The partner grasps the lower trapeze and brings her feet through between the hands until she reaches the position shown in Figure 143.

3. Bird's Nest Position (Figure 144) Starting Position: The performer hangs from a back lever position in this stunt rather than by his knees. While hanging by his knees, he places the grip securely between his teeth. He then holds tightly to the trapeze with his hands and lowers his legs backward until they point towards the floor.

Execution: The partner slowly places her weight on the lower trapeze, pulls her feet up and flexes them around the bar. She arches her back and holds the Bird's Nest position. The performer then pulls his legs upward and backward until they are parallel to the floor as

shown in Figure 144. After holding this position for several seconds, the girl returns in the opposite direction to the floor, and the performer returns to a sitting position on his trapeze.

4. Back Swan Position; (Figure 145) Starting Position: The performer goes through the same preliminary movements to reach the back lever position as described in the Bird's Nest; Back Lever stunt. The partner sits on her trapeze.

Execution: She slowly moves her weight forward until the center of gravity is across the trapeze. She leans back gradually and arches her back. The performer then brings his legs upward and backward to the back lever position. After this is held for several seconds as shown in Figure 145, the girl re-grasps the chains, pulls herself back to a sitting position, and dismounts to the floor. The performer returns to a sitting position on his trapeze.



FIGURE 144

Bird's Nest Position;
Back Lever



FIGURE 145

Back Swan Position;
Back Lever

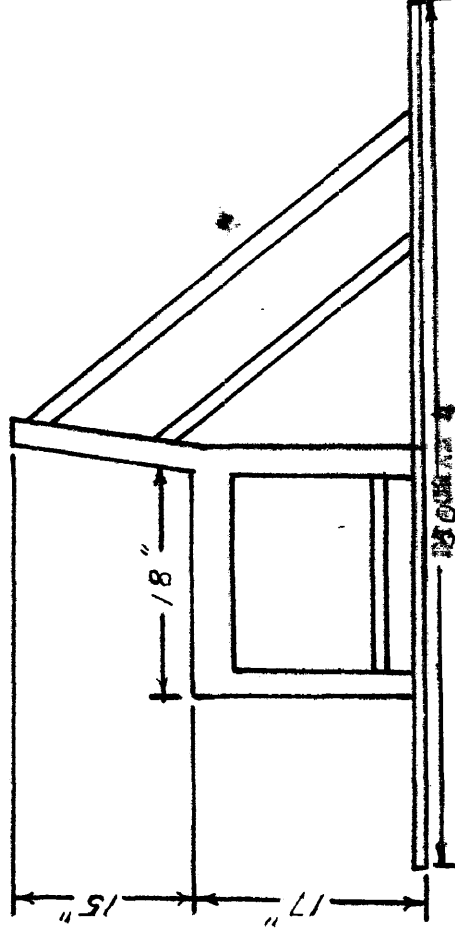
CHAPTER VIII

THE ROMAN CHAIR

The Roman Chair has been a popular number witnessed on the professional stage for many years. Strength is a major factor in its successful presentation; however, a keen sense of balance on the part of both the understander and the top-mountner is extremely important.

PART I -- EQUIPMENT USED

1. The (Diagram 4 and Figure 146) Any strong, straight backed chair is adequate. Assistance from the school welding shop can remodel a sturdy chair into one suitable for this number. The back must withstand severe strain, therefore, it should be braced with such material as three sixteenth inch by one inch angle iron. The height of the back varies according to the person using the chair. The one in the accompanying photographs was thirty two inches high. It had been satisfactory for understanders weighing from one hundred sixty to one hundred eighty pounds, and who varied in height from five feet six



The Roman Chair

inches to six feet.

2. The Skis (Diagram 4 and Figure 146) The skis should be approximately four feet long, one half inch thick, and four inches wide. It is preferred that the skis be made from seasoned oak or hickory wood.
3. The Belt (Diagram 4 and Figure 146) Great care should be given to the selection of the belt that fits across the performer's feet and encompasses the chair seat. A wide leather strap, padded by cloth, is recommended. In an emergency, a padded rope may be used. In all instances, the belt or rope must be snug to provide maximum safety.

PART II -- PREPARATION FOR ROMAN CHAIR LIFTS

1. Feet to Hands Get Up (Figures 147, 148, 149, 150, 151, and 152) Starting Position: This is an excellent lead up stunt to be learned before attempting Roman Chair lifts. The understander lies on his back, and



FIGURE 146

The Roman Chair



FIGURE 147

Starting Position: Feet to Hands
Get Up

places his hands on the floor beside his shoulders. The top-mounter faces his feet and stands in his hands. After "A" grasps "B's" feet, the latter jumps up and slightly forward to the position shown in Figure 147.

On a signal, "B" leans slightly forward, and trying not to bend at the waist. Then her weight goes so far forward that the balance cannot be maintained, "A" bends his arms and begins raising his trunk as shown in Figure 148. He must try to keep his forearms as nearly perpendicular to the floor as possible.

Figure 149 shows the succeeding part of the movement in which "A" has reached the sitting position. His elbows are near his sides, and the forearms remain perpendicular to the floor. He then places his left knee on the floor and allows his left foot to rest high beneath the right thigh. Following this movement, "B" leans slightly forward



FIGURE 148

Initial Motion of the "Get Up"



FIGURE 149

Sitting Position of the "Get Up"

and to the left as shown in Figure 150. This will facilitate "A" "rocking" up to the left knee. It should be stressed throughout all of the movements of this stunt that the understander's trunk must be as erect as possible, and his forearms must be perpendicular to the floor at all times. "B's" legs must be straight. Sometimes it is desirable to have her hands at the sides since arm motions have a tendency to disturb the balance.

After "A" supports the weight on his left knee, he places the right knee on the floor to stabilize his weight as shown in Figure 151. He then places his right foot forward with the heel in front of the left knee. Figure 152 shows this position. He stands up and presses "B" overhead to a high feet to hands position. She is pushed up slightly farther and given a quarter turn either to the left or right. She descends in a sitting position, and "A" catches her with one hand



FIGURE 150

"Rocking Up" to Left Knee



FIGURE 151

Resting on Both Knees

beneath her knees and the other hand behind her back.

This stunt is appropriate either in a part of a balancing routine or as an isolated series of movements to help two performers prepare for the Roman Chair. The same stunt can be done with the top-mounter in a hand balance.

PART III -- ROMAN CHAIR STUNTS

1. Feet to Hands (Figures 153, 154, 155, 156, 157, 158, and 159) Get Up Position: Figure 153 shows the understander in the correct starting position. When he ascends or descends alone, he should maintain an arched back throughout the entire movement except when his shoulders finally touch the floor. It is much more difficult to do it this way than in a crouched position. Figure 154 shows the understander in the mid-point of his descent. It may be noticed in this



FIGURE 152

Beginning to Stand



FIGURE 153

Starting Position: The Roman Chair

photograph that the skills of the chair were too short for such a stunt. This necessitated his partner standing on the forward end of the skis to prevent the chair from falling over backwards. If the performer had descended in a crouched position, this would not have been necessary. Figure 155 shows the understander in a relaxed position with his shoulders on the floor as he awaits the top-mounter. For good showmanship, the understander may slowly return to the standing position. The girl may then duplicate the stunt.

"B" steps in his hands after he has paused momentarily with his shoulders on the floor, and this is shown in Figure 156. On a signal, "B" jumps upward and slightly forward as "A" raises his arms until they are locked overhead.

Inasmuch as the following movements are dangerous during the learning process, two spotters should always be present, one in front



FIGURE 154

Mid-point of Descent



FIGURE 155

Final Point of Descent

of the chair, and one behind the chair. If the top-mounter leans so far forward or backward that the understander can no longer maintain the balance, the latter should immediately release his grasp and permit the partner to dismount in the best way possible. If the fall is forward, it is relatively simple to jump to the floor. If the fall is backward, it is difficult to land safely. Regardless of the ability of the performers, there should always be a capable spotter in back of the chair to catch the top-mounter under the arm pits should a fall occur.

Figure 157 shows "B" leaning slightly forward as "A" tries to stay directly beneath her. As she leans, his arms go forward several inches. Then, simultaneously, he rises and bends his arms so that the elbows rest on the hips. This is shown in Figure 158.

The upward movement continues until the performers are supported by the seat of the chair as shown in Figure 159. "A" carefully removes



FIGURE 156

Preparing for the Lift



FIGURE 157

Feet to Hands; Ready to Rise

each foot from beneath the belt. He cautiously steps from the chair to the floor and faces the audience. "B" is then pressed overhead, held momentarily, and given a one quarter twist. She descends in a sitting position while "A" catches her with one arm beneath the knees and the other hand behind her back.

2. Get Down. Get Up Starting Position: "A" stands on the chair seat. "B" mounts to his shoulders and stands in his hands as shown in Figure 159. "A" lowers his shoulders to the floor and returns to the standing position.

3. Hand to Hand Get Up Starting Position: "B" holds a hand balance on "A's" hands throughout the entire routine. This is a more difficult stunt than those previously described in this chapter; however, it is less dangerous since it is quite easy to dismount to the feet whenever the balance is lost.



FIGURE 158

Half Way Up



FIGURE 159

The Standing Position

CHAPTER IX

ROPE SKIPPING

There are few persons who have not skipped rope. The fun of doing "One, Two, Three O'Leary," "Double Dutch," and trying to out-jump a friend is not easily forgotten. To many people, however, rope skipping is remembered as an activity for elementary school children. Boxers and basketball coaches have for many years used it as a conditioner for their athletes. Rope skipping is also valuable in the development of rhythm for children, and it can be a challenging recreational pastime.

Like many of the activities described in this manual, rope skipping is inexpensive to conduct, and it may be done in small areas. It may be conducted in a corner of the gymnasium, in the corridors, in recreation rooms, and out of doors.

PART I -- EQUIPMENT USED

1. Rope Three eighth inch sash cord is the best for general purposes. The length will vary according to the individuals and the stunts they try. A rope about seven or eight feet long is adequate for most students. Adhesive tape should be wound around both ends to prevent fraying. If colored tape is wound around the rope at intervals, it produces an enhancing effect. Strobolite lighting on ropes that have been treated with fluorescent paint will make the number even more attractive.
2. Bells For special sound effects, it is recommended that performers wear small bells on their ankles. The bells may be purchased in most

department stores.

3. London For the Jump; Standing on Shoulders stunt, it is necessary Extension Bars to construct two wooden bars about two feet long, and one inch square. Each end of the rope is attached to the bars.

PART II -- INDIVIDUAL STUNTS; ONE ROPE

Skipping should be done on the balls of the feet, and the performer should jump off the floor just high enough to clear the rope as shown in Figure 160. When the person jumps higher, he wastes effort. More energy will be conserved and better control established if the rope is turned primarily with the wrists rather than the arms.

Much of the skipping described in this chapter will be self explanatory; therefore, only the more complex stunts will be described in detail.



FIGURE 160

**Turn Rope Forward;
Jump on Both Feet**



FIGURE 161

**Turn Rope Forward;
Jump with Feet Crossed**

1. Turn rope forward; jump on both feet as shown in Figure 160.
2. Turn rope forward; jump on left foot.
3. Turn rope forward; jump on right foot.
4. Turn rope backward; do any of the above jumps.
5. Turn rope forward; alternate jumps on left and right foot.
6. Turn rope backward; alternate jumps on left and right foot.
7. Turn rope forward; run forward.
8. Turn rope forward; run backward.
9. Turn rope backward; alternate running forward and backward.
10. Turn rope forward; jump with feet crossed as shown in Figure 161.
11. Turn rope forward; hold one leg high and the knee straight; toes pointed. Jump on the other foot.
12. Same as #11, but throw the raised leg forward on one jump

**FIGURE 162****The Slip****FIGURE 163****Jumping in a Deep Knee Bend Position**

and backward on the next jump.

13. Turn rope forward; jump with the feet spread sideward.

14. Clap hands each time the rope is jumped.

15. Turn rope forward; rocker. That is, leap forward on one foot, leap backward on the other foot.

16. To change direction of the rope, or to permit the jumper to make a different type of jump, use the Slip. Figure 162 shows a student doing this as she swings the rope to one side while maintaining the same jumping rhythm.

17. Double jump forward. That is, the performer stays in the air for each two turns of the rope.

18. Jump in a deep knee bend position as shown in Figure 163.

19. Cross Jumping. Cross the arms in front of the body, and make certain that the wrists are far to each side as shown in Figure 164.



FIGURE 164

Cross Jumping



FIGURE 165

Cross Jumping; Deep Knee Bend Position

20. Cross jumping from a deep knee bend position as shown in Figure 165.

21. Turn rope forward; click heels together while in the air.

22. Turn rope forward; move sideward right or left on each jump.

23. Grasp both ends of the rope in one hand and assume a deep knee bend position. Swing the rope in a circular path near the floor. Jump the rope as it passes under both feet.

24. Same as #23, but jump with either the right or left foot.

25. Jump rope on back as shown in Figure 166. The performer lies on her back with the legs tucked, and the knees resting on the chest. She grasps the rope at both ends, and the middle of the rope is on the floor near the head. As the rope is passed over the legs, the legs are extended vigorously to allow the rope to pass beneath the body. This should be done rhythmically five or six times.



FIGURE 166

Skipping Rope on Back



FIGURE 167

Preparing to Jump in With Partner

26. Alternate crosses. The performer does one cross jump between each orthodox jump

PART III -- DOUBLES STUNTS, ONE ROPE

1. No. 1 turns the rope forward as No. 2 prepares to run in as shown in Figure 167. No. 2 runs in facing the partner, and both jump as shown in Figure 168.

2. Same as #1 except that after No. 2 jumps several times, she is given the rope from No. 1 as shown in Figure 169.

3. Same as #1 except that No. 2 turns around while she jumps.

4. No. 1 turns the rope forward. No. 2 runs in behind No. 1 as shown in Figure 170.

5. This is a continuation of #4. After No. 2 runs in behind No. 1, the latter hands No. 2 the rope as shown in Figure 171, and both



FIGURE 168

Jumping; Face to Face



FIGURE 169

Jumping Face to Face;
No. 2 Receives Rope From No. 1

**FIGURE 170****No. 2 Comes in Behind No. 1****FIGURE 171****No. 1 Exchanges Rope with No. 2****FIGURE 172****Jumping Side by Side****FIGURE 173****Side by Side; Turn Around**

performers continue to jump.

6. The partners stand side by side facing in opposite directions, and they clasp their left hands. Each turns an end of the rope in the right hand. For one, the rope will turn forward, and for the other it will turn backward.

7. Same as #6 except that the partners jump first with their inside knees raised, and later with their outside knees raised.

8. Jumpers stand back to back, and each turns a rope end with the right hand.

9. Partners stand side by side while they turn the rope with the outside hands as shown in Figure 172.

10. Continuation of #9. After jumping several times, both partners turn towards the outside and grasp the rope ends with the other hands so that the rope will always be turned by the outside hands as shown in Figure 173.

11. No. 1 turns the rope forward. No. 2 runs in and turns her back to No. 1. No. 2 then bounces a ball as she jumps.

12. Jump; Standing on Thighs (Figures 174 and 175) The under-stander bends his knees. The top-mounter faces him, grasps his hands, and places her left foot on his right thigh. She is assisted upward so that both of her feet rest high on his thighs. He holds her firmly behind her thighs as shown in Figure 174. The rope used for this stunt is approximately twelve feet long, and its mid-point rests on the floor in front of the understander's toes. On a signal, the top-mounter whirls the rope over their heads, and the understander jumps a moment after it passes over his head. As he jumps, he tightens his grasp as shown in Figure 175.

13. **Jump; Standing on Shoulders (Figures 176 and 177)** The rope used is approximately twelve feet long and is attached to wooden extension bars. The top-mounter stands on her partner's shoulders as described on page 25. The bars are held with both hands to allow the mid-point of the rope to rest behind the heels of the understander. The latter grasps her calves firmly as shown in Figure 176. As the rope is turned forward, the understander sees it pass in front of his face; then he jumps as shown in Figure 177.

PART IV -- INDIVIDUAL STUNTS; ONE ROPE, THREE PERFORMERS

In the performance of these stunts, unless otherwise stated, one performer will swing one end of the rope, a second performer will swing the other end of the rope, and a third performer will do the particular stunt between the two partners.



FIGURE 174

Starting Position: Jump; Standing on Thighs



FIGURE 175

Jump; Standing on Thighs

1. Run in jumping any number of times, and jump out.
2. Run in; jump on one foot or on alternate feet.
3. Run in; do one quarter, one half, three quarter, and one full turn in the air on each successive jump.
4. Jump in the air and click the heels together.
5. Jump while in a deep knee bend position.
6. Jump in the air with the feet forward and apart. Touch the toes with the fingertips.
7. Squat on all fours facing one partner. Jump on all fours.
8. Do a series of short, diving rolls as the partners turn the rope forward.
9. Do a series of back handsprings as the partners turn the rope forward.
10. Do a series of bucking bronchos as the partners turn the



FIGURE 176

**Starting Position: Jump; Standing
on Shoulders**



FIGURE 177

Jump; Standing on Shoulders

rope forward. The middle performer stands on his hands momentarily immediately after the rope passes beneath his feet. He kicks down to his feet fast, and continues this motion rhythmically.

It should be pointed out that in some of these stunts such as the last three described, the responsibility for the success of the stunt rests in the hands of those turning the rope. The person jumping may receive credit for the performance, but the turners must turn the rope according to the movements of the jumper. The jumper does not have to alter his jumping to fit the rhythm of the rope.

11. The middle-performers line up behind one turner. The one nearest the rope runs in, jumps once, runs out, and lines up behind the opposite turner. In the meantime, the next middle-performer repeats the above stunt. In this way the rope is never free from jumpers. When all performers have taken their turns, the first jumper does another stunt such as jumping with the legs crossed as shown in Figure 178. All behind her duplicate the stunt.



FIGURE 178

Jumping with Legs Crossed

PART V -- PARTNERS JUMPING; ONE ROPE, THREE OR MORE PERFORMERS

1. Minnet turn. Partners run in holding their inside hands. As they hold their hands high, one makes an eighth and full turn under the arm of the other.

2. Jitterbug. Partners run in and face each other. They place their hands on each other's shoulders and kick alternate legs high as they jump.

3. The middle-performer runs in and jumps. Then both turners quickly shift the ends of the rope to their outside hands and jump inside the rope as shown in Figure 179.

4. Same as #3 except that the middle-performer runs in while jumping her own rope as shown in Figure 180.

5. Partners pass or bounce a ball to each other. Both may be "in" or one "in" and one "out."



FIGURE 179



FIGURE 180

Turners and Middle-Performer Jumping Turners Jumping; Middle-Performer
Jumping Her Rope

PART VI -- INDIVIDUAL STUNTS, TWO ROPES, THREE PERFORMERS

1. "Double Dutch." Two ropes are turned alternately; the rope nearer the jumper is turned forward, and the rope away from the jumper is turned backward. The middle-performer jumps over each rope from side to side.

2. "Double Irish." Two ropes are turned alternately, and both ropes are turned away from the jumpers. The jumper jumps from side to side.

3. "Egg Beater." Two large ropes are turned at right angles by four turners. The jumper jumps over each rope.

4. Same as #3 except that the middle-performer jumps her own individual rope at the same time she jumps over the other two ropes. ²⁶

26. Annette J. Rogers, and others, "Repe Skipping." Springfield, Illinois: Department of Physical Education. Office of Public Instruction, 1945. p. 6.

CHAPTER X

THE SLACK WIRE

The slack wire, rather than the tight wire, is described in this manual inasmuch as it is simpler to construct and to erect in a school gymnasium. Most youths find something fascinating and challenging about balancing themselves on a narrow beam. Evidence for this is found in the fact that many children attempt to walk a railroad track and later a back yard fence. This interest may be further stimulated as the children witness a performance on the slack wire in the circus.

The slack wire is relatively safe, its construction is uncomplicated, and the cost is low. With these factors in mind, it seems desirable to advocate its use in the school program. Figure 181 and Diagram 5 provide a description of the principal parts of the equipment.



FIGURE 181

Performer Standing Beside the Principal Parts of the Slack Wire

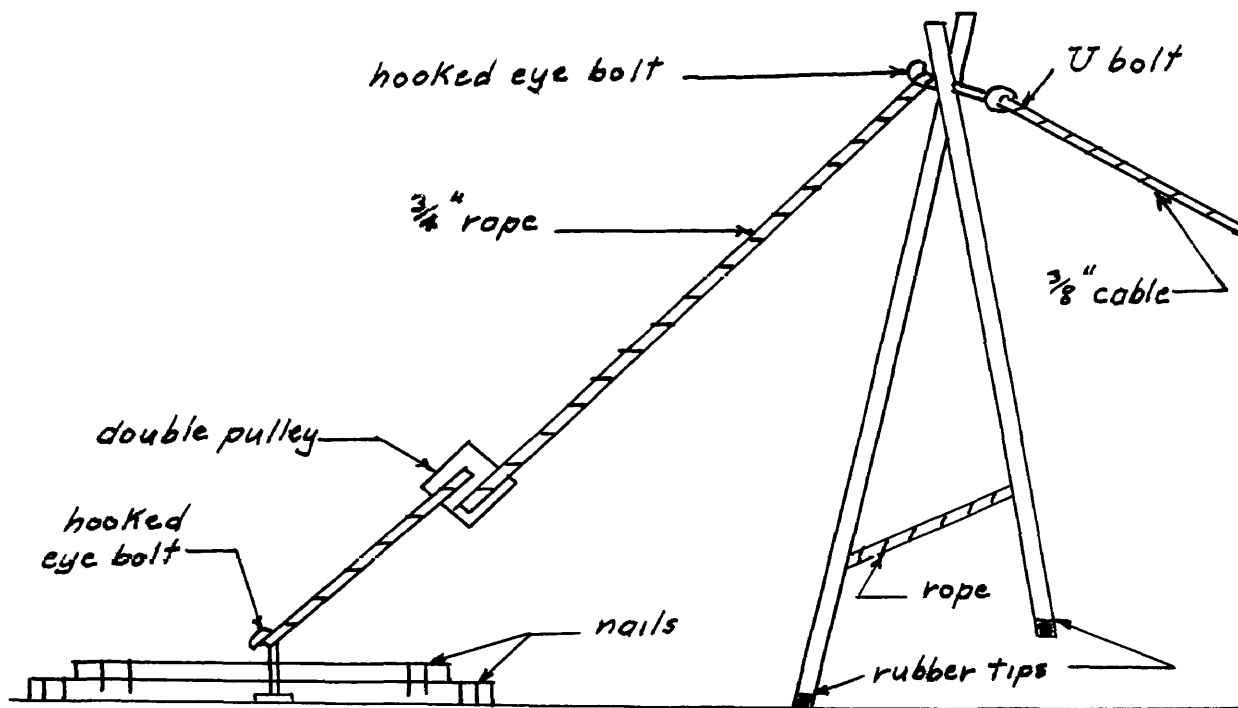


DIAGRAM 5

The Slack Wire

PART I -- EQUIPMENT USED

1. The Cable (Figure 181 and Diagram 5) The cable should be about one quarter inch or three eighths inch in diameter (similar to that used for the support of a gymnastic horizontal bar). It is recommended that the wire be twenty two feet in length in order that there will be from fifteen to seventeen feet available for walking purposes. This type of cable may usually be obtained from hardware or marine supply stores. As shown in Figures 181 and Diagram 5, the cable is attached to eye bolts on each end and with "U" bolts. Until the performer is proficient on the wire, the cable should be attached to both ends in such a manner that its mid-point is about three inches from the floor when the performer is on the wire. If the performer should fall when the cable is higher, it might spring up between his legs and cause a serious injury.

2. The Uprights (Figure 181 and Diagram 5) Three quarter inch (diameter) pipe is adequate, and the length of the pipe may vary from four feet to eight feet depending upon the amount of slack the performer desires in his wire. When longer pipes are used, the points of attachment for the cable may be raised to provide the necessary slack. The uprights have rubber tips similar to those used on crutch tips. These are used to prevent the pipes from slipping. The uprights shown in Figure 181 are about four feet six inches long, and they are joined together with eye bolts four feet from the floor. The pipes are prevented from spreading by means of a rope attached to both pipes one foot above the floor.

3. The Ropes (Figure 181 and Diagram 5) A three quarter inch rope joins the hook near the top of the upright to a double pulley near the floor. This may be tightened or loosened to change the slack of the wire for various stunts.

4. The Floor Attachment (Diagram 5) For gymnasium purposes, the most desirable location for the slack wire is in the corner of the gymnasium. This arrangement permits the attachments to be made with lead plugs in the adjoining walls. For exhibitions, however, the following method has been found to be satisfactory.

A wooden block two feet long, two inches thick, and four inches wide is solidly nailed to a wooden block three feet long, two inches thick, and four inches wide. A hooked belt is inserted through the center of both blocks, and a nut is counter sunk and attached to the end of the belt. Prior to the performance, the longer block is nailed to the floor with four nails in each end. A second block is made in an identical manner, and this is placed in the floor for the support

of the opposite end of the cable. At the conclusion of the performance, the blocks are removed and plastic wood or match sticks are inserted in the nail holes to prevent disfigurement of the floor.

PART II -- STUNTS

1. Mount- (Figures 182 and 183) Starting Position: The performer in the places his feet on the wire until it is motionless. He stands next to the mid-point of the wire so that the left foot is placed on the wire. The right foot is underneath the wire so that the wire is touching the right ankle. He looks at the end of the wire rather than down at his feet.

Execution: Figure 182 shows the performer in the starting position as he is about to slowly straighten his left leg. When this foot is placed on the wire, it should be parallel to the wire as the



FIGURE 182

Starting Position: Mounting the Wire



FIGURE 183

Standing on the Wire

forms a line from between the big toe down to the center of the heel.²⁷
Every effort should be made to step on the wire the same way each time.

The balance should first be controlled with one foot on the wire and the other foot slightly off the floor. After this has been accomplished, the free foot is then placed on the wire behind the other one as shown in Figure 183.

2. Walking Starting Position: The performer stands with both feet on the wire the wire.

Execution: He glides one foot forward on the wire, and the rear foot slides forward to meet the other heel. Movement is made without actually lifting the feet from the wire. Gliding backwards is also a movement in the progression on the wire. After the glide has been learned, the performer learns to walk by bringing one foot over and



FIGURE 184

Turning on the Wire



FIGURE 185

Grasping a Handkerchief

27. Chester O. Jackson, Unpublished notes given the writer at the University of Illinois, Champaign, Illinois, 1946.

ahead of the other in short steps.

2. Kneel- Starting Position: The performer stands with both feet on the wire the wire.

Execution: The feet are placed approximately ten inches apart, and the performer kneels on the knee of the back leg. He may later learn to kneel on the forward knee, and walk forward on the knees.

3. Turn- (Figure 184) Starting Position: The performer walks towards the forward end of the wire.

Execution: He should walk forward to the point where the wire makes a sharp angle with its attachment to the uprights. The feet should be about six inches apart. If the right foot is forward, he should turn to the left. If the left foot is forward, he should turn to the right. The weight shifts forward to the ball of the forward foot, and the body quickly turns one hundred eighty degrees on the balls of both feet until the weight can be equally distributed again.

4. Grasp- (Figure 185) Starting Position: A handkerchief is shaped in the form of a cone and placed on the floor near the middle of the wire. The performer stands on the opposite side of the wire and faces the handkerchief.

Execution: He squats until his knees touch the wire. The weight is shifted forward until the toes rise from the floor and the weight is supported entirely with the knees as shown in Figure 185. While the performer uses his arms to help maintain his equilibrium, he bends forward at the waist until he can grasp the handkerchief with his teeth. Once it is between his teeth, he rises and dismounts from the wire.

5. Lying (Figures 186 and 187) Starting Position: The performer on the wire

walks backward to the point on the wire where a sharp angle is made with the attachment to the uprights.

Execution: He keeps his trunk vertical as he sits gently with most of the weight on the right foot which is in back of the left foot. After he sits low enough, the wire will pass through the center of his buttocks. He then immediately hooks the wire with his left foot as shown in Figure 186. When he has established his equilibrium, the performer reclines until his entire back and head is in contact with the wire. The forward foot should be pressed against the wire continuously to help maintain the balance as shown in Figure 187.

In returning to the standing position, the forward foot should be brought back until it is about three inches in advanced of the rear foot. A quick forward rocking motion is then made to assist the performer in



FIGURE 186

Sitting on the Wire

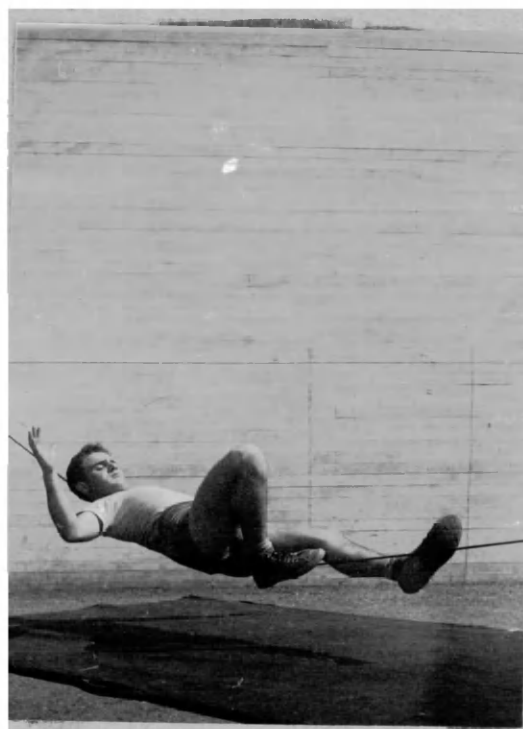


FIGURE 187

Lying on the Wire

rising to a standing position.

6. Walking (Figure 188) Starting Position: This stunt should first in a Hoop

be practiced on the floor with a bicycle rim. When confidence is gained on the floor, the stunt may be attempted on the wire. The performer should stand on the wire and hold the hoop in one hand.

Execution: One foot is placed at the base and inside the hoop. As soon as the weight is placed on that foot, the hoop moves a few inches forward. This provides additional space for the other foot to be placed in front of the first foot. As soon as the second foot is ready to be placed inside the hoop, the hand is released from the hoop, and the body is kept vertical as shown in Figure 188. The knees should be pressed against the hoop to assist it in remaining vertical.



FIGURE 188

Walking in a Hoop



FIGURE 189

Stepping into the Hoop

7. In and (Figures 189, 190, and 191) Starting Position: Passing a Out of a hoop over the body takes a good sense of balance while standing on one foot most of the time. The performer stands on his right foot and holds the hoop with the right hand.

Execution: He lifts his left knee high until it nearly touches the chest; then he steps through the hoop as shown in Figure 189. The hoop is raised high until it passes over the head. The shoulders are hunched, and the elbows are kept close to the sides as shown in Figure 190. The hoop is pulled downward with the hands, and when it is near the knees as shown in Figure 191, the left foot returns to the wire. The right leg is raised, and the hoop is brought underneath the front foot to complete the stunt.

8. Pumping (Figures 192 and 193) Starting Position: This is a difficult the wire



FIGURE 190

The Hoop Goes Over the Head



FIGURE 191

Coming Out of the Hoop

cult stunt but very effective when it is executed with ease. It is potentially dangerous and should be practiced with mats beneath the wire to protect the performer against any unanticipated falls. The performer stands on the wire near the center.

Execution: His trunk is erect, and simultaneously he bends his knees and laterally flexes his hips. This causes the wire to move rapidly from side to side. This is done slowly at first, but as rhythm and coordination improve, the speed and angle of the swing are increased with faster flexions.

9. Balancing (Figure 194) A sturdy ladder about six feet high with on a Ladder: Hand Holding rungs ten inches apart should be constructed for this a Runge number. A one half inch notch made at the base of both uprights will make it easier to balance on the wire. The performer stands on the floor next to the middle of the wire and rests the ladder



FIGURE 192

Pumping to the Right



FIGURE 193

Pumping to the Left

on the wire.

Execution: He grasps the rung that is about shoulder high, and places his inside foot on the lowest rung. Gently, he raises the outside foot from the floor until all his weight is placed on the ladder as shown in Figure 194.

10. Balancing (Figure 195) **Starting Position:** The performer stands on a ladder; Repe in Mouth on the ladder as explained in the preceding paragraph. A short rope is attached to the upper section of the ladder.

Execution: He places one end of the rope between his teeth, leans away from the ladder slightly, and releases his grasp on the ladder as shown in Figure 195.

11. Standing (Figure 196) **Starting Position:** The performer stands in Sideways the middle of the wire.

Execution: He shifts his feet so that the wire passes underneath



FIGURE 194

Balancing on a Ladder;
Hand Holding a Rung



FIGURE 195

Balancing on a Ladder;
Rope in Mouth

balls and instep of the feet, but not underneath the heels. He then turns his trunk and holds the balance.

12. Balancing (Starting Position: The performer stands on the wire on a Chair

several feet in back of the mid-point. He lifts a chair off the floor, and prepares for the stunt by transferring the chair from hand to hand to accustom himself to the added weight.

Execution: He places the chair behind him and slides it sideways until the cable fits into the notches that have been built into the supports for the legs. As he prepares to sit, he holds the chair tightly. After he sits, he places his hands to the side to assist him in maintaining his balance. The legs are outstretched diagonally for the same purpose. When he is ready to stand, he grasps the chair with one hand, removes it from the wire, and quickly rises.

FIGURE 196

Standing Sideways

CHAPTER XI

THE SPANISH WEB

When a person witnesses a circus and observes many performers doing identical routines, he can suspect that the work they do is not very difficult. This is true of most stunts done on the Spanish Web. The accompanying photographs will reveal that the Spanish Web is a type of vertical rope used in performing acrobatic stunts such as hanging by a foot and a hand, by two feet, by two hands, etc. Nearly always girls are selected as the principal performers with boys as their assistants. There is no reason, however, why boys cannot do the principal's work too.

PART I -- EQUIPMENT USED

1. The (Diagram 6) A cotton rope twenty five feet long and one inch Web in diameter is most desirable. Although an ordinary. Gymnasium climbing rope may be used, undue chafing of the performer's legs will result. This will discourage any performer from continuing with this number. A rope has been pulled through and attached to a discarded fire hose to serve as a substitute web to provide a softer surface for the legs to rub against. The Appendix lists companies that make professional webs.

Should one decide to construct his own web, the following suggestions are offered. The cotton rope should be untwined into its several strands. Almost every two feet a string should be tied around the rope to keep it together. This process helps to make the rope softer and

and less irritating for the performer. The rope should be laid down while the covering is wrapped around it and sewed tightly as a seam. Thin, hosing material or light canvas is suggested for the wrapping. The cover should be sewed directly into the rope at the top in order that one's weight will not cause the cover to slip.

The top of the rope should be pulled through the swivel as shown in Diagram 6, and fastened tightly with twine. A swivel is necessary for stunts requiring the performer to rotate; otherwise the web will twist on the arm or leg. Swivels may be purchased in hardware stores, and they give a satisfactory performance for most stunts. For superior performances, however, a professional swivel that operates on ball bearings must be used.

Before the web is used, it is always desirable to have it tested by having several boys place their weight on it simultaneously to be certain that it will hold the weight. All stunts should be practised several feet from the ground before attempting them at the height eventually desired.

2. The (Diagram 6) An essential component of the complete Spanish Loop

Web is the loop which is used for grasping the web with the hand or for supporting the ankle. This should be made of a soft, sturdy webbing similar to that found in an Army or Navy belt. It should be about one inch wide and thirty inches long. Even one half inch cotton rope might be used in an emergency. In any case, it is recommended that the loop be padded heavily with gauze or a covering similar to hosing.

The ends of the webbing, or rope, must be securely sewed together to form a loop, and this is taped to the rope at the desired height. A

small leather loop (sometimes known as a lock) is made to encompass the loop. Once the hand or foot is inserted in the loop, this leather lock is pulled down to provide greater safety for the performer. It is possible to do routines without this leather device, but it is not advised. When experts on the professional level insist upon the lock, one realizes that they must have proven their value.

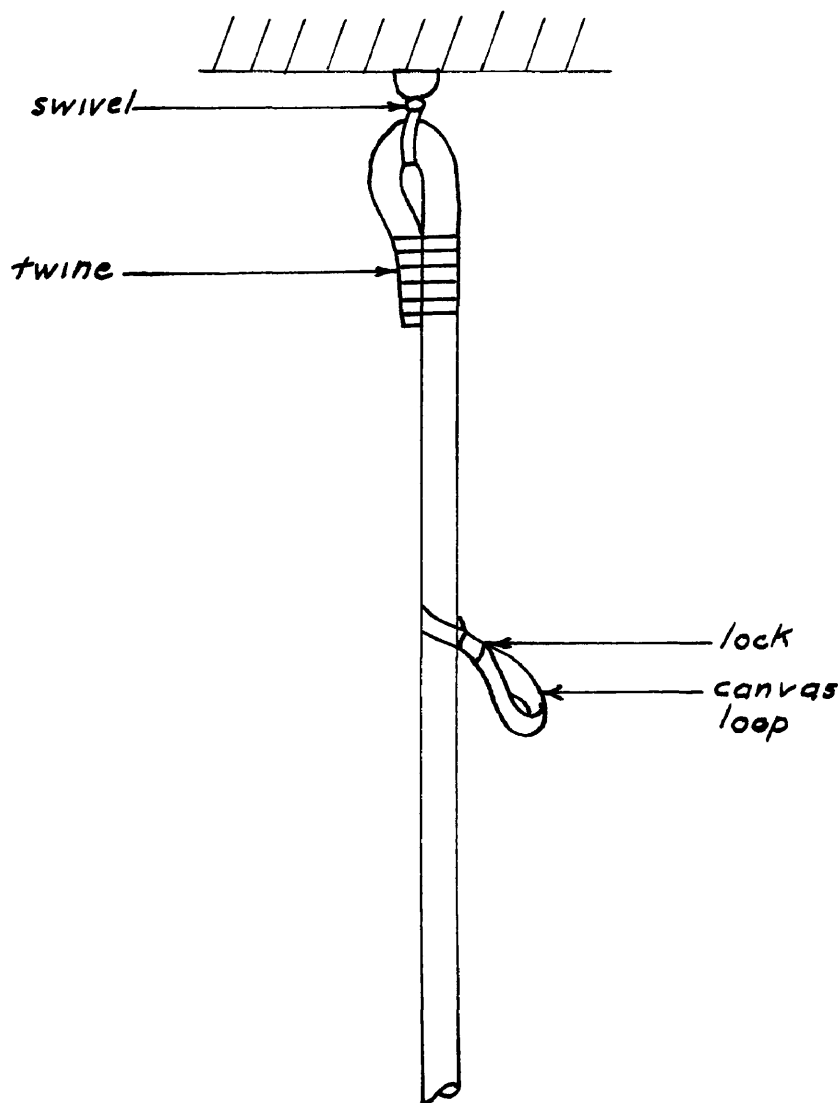


DIAGRAM 6

The Spanish Web

PART II -- STUNTS

1. Climbing Starting Position: The neophyte web performer may use any the web method she desires in climbing the web. She may begin either from the floor or from her partner's shoulders. A partner stands on the floor and pulls the web taut during the climb and for most stunts. The photographs do not always show this assistant.

Execution: One method of climbing is to hold the web with two hands while the soles of both feet press against the web. It takes but a short time before the performer decides, however, that climbing can be done in a more graceful manner.

The preferred procedure is to grasp the web with both hands as the web passes between the legs. The right leg entwines itself around the web to secure a firm grip while the left leg is extended outward. Meanwhile, the arms reach for a new and higher grasp. Once the new grasp has been made and the body raised a few inches, the left leg wraps itself around the web, and the right leg is extended outward. Not only does this alternation of leg grasps make the act look more attractive, but it affords a rest for each leg.

2. The (Figure 197) Starting Position: The performer holds the web Arabesque tightly in front of her.

Execution: She wraps her left leg tightly around the web, and places her trunk to the right of the web and then perpendicular to it as shown in Figure 197. She extends the right leg and raises it backward as high as possible. It is then possible to bring the trunk up, lean backward, and extend the right leg forward to reverse the original Arabesque.

3. Hand (Figure 198) Starting Position: After the Arabesque has been Flag completed, the right hand is placed in the loop, and the look is adjusted.

Execution: The left hand is kept straight and placed on the web at a level even with the waist. When the performer is in this position, the partner may revolve the web fast until the former's body is nearly parallel to the floor.

4. Bird's (Figure 199) Starting Position: The Hand Flag.
Nest

Execution: Both hands continue to grasp as is done in the Hand Flag stunt. Instead of keeping the legs extended, they are brought up between the arms until the insteps can hook themselves firmly against the web. The back is arched as much as possible.

5. Inverted (Figure 200) Starting Position: The web is held with two
One Leg Hang hands as the legs are brought overhead. The partner must



FIGURE 197

The Arabesque



FIGURE 198

The Hand Flag

pull down on the web as tightly as possible.

Execution: Figure 200 shows how the web must go outside her left thigh, across that knee, and inside the ankle. When the leg is rigidly extended, the hands may be released, and the performer should have little fear of falling. The performer must never relax the supporting leg, and her partner must never cease to pull the web tightly.

6. Inverted (Figure 201) Starting Position: The web is held with Foot-Hand Flap both hands, and the legs are down.

Execution: The legs are brought upward, and the right foot is placed in the loop. After the lock has been adjusted, the body is lowered slowly until it is outstretched in an inverted position. The right hand grasps the web and pushes it away as shown in Figure 201. The left leg is moved sideward, and the left arm is also extended to the side.



FIGURE 199

The Bird's Nest



FIGURE 200

The Inverted One Leg Hang

7. Foot (Figure 202) Starting Position: After holding the Inverted Flag; Upward Foot-Hand Flag for several seconds, the performer places the left foot firmly against the web.

Execution: The left sole assists the body in making a full extension. The arms are overhead, and the performer faces the ceiling.

8. Foot (Figure 203) Starting Position: Foot-Flag; Upward.

Flag;

Sideways Execution: The performer rotates the hips and sole of the left foot until she faces the audience rather than the ceiling. The assistant has rotated the performer in the photograph so that she appears from the opposite side.

9. Foot Starting Position: Foot-Flag; Sideways.

Flag;

Downward Execution: The performer rotates the hips and soles of the left foot to allow the chest to face towards the floor.

10. One Hand Starting Position: The Hand Flag.
Rotating Flag



FIGURE 201

The Inverted Foot-Hand Flag



FIGURE 202

The Foot Flag; Upward

Execution: The partner revolves the performer rapidly, and then the latter releases the grasp she holds with the left hand.



FIGURE 209
The Foot Flag; Sideways

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An outline of the demonstration program used in the Newark, New Jersey public schools. Provides material for: comedy juggling, marching, mass drills, olog dancing, and pyramids.

B. PERIODICALS

Anderson, C. F. "Practical Hints on Demonstrations," Journal of Health and Physical Education, 7:3:156. March, 1936.

Lists the values of a physical education demonstration as: an opportunity to "sell" the director to the community, a means of developing an interest towards physical education, an opportunity for children to appear before the public, and to raise money for the school. Explains the importance of music, timing, and rehearsals.

Brown, Margaret. "Athens to America," Journal of Health and Physical Education, 7:9:546. November, 1936.

Excellent ideas that show a physical education demonstration focusing its activities around an Olympic theme. There are photographs of tableaux that show the progress of sports in several countries.

Butcher, D. F., "Circus School," Saturday Evening Post, 214:46:24, May 16, 1942.

Excellent photographs and descriptions of the Billy Schultz Manitowoc, Wisconsin community circus.

Danford, Howard G., "The Physical Education Demonstration for Elementary Schools," Journal of Health and Physical Education, 2:4:20, April, 1931.

Describes how thousands of children can present thirty different acts in one and one half hours.

Field, David A., "Gymkhana Troupe," Industrial Sports Journal, 9:8:26, August, 1949.

Offers suggestions for having an exhibitional gymnastic troupe represent an industrial firm for the purpose of establishing good will as well as for advertising the firm.

Fish, Ralph E., "How to Run a Circus," Journal of Physical Education, 24:3:47, November, 1926.

Tells how side shows of the minstrel, animal, or aquatic variety can help to augment a circus. Advises careful selection of dates to avoid conflicting with other community activities.

Haskin, Jack, "The Gymnasium Circus in the Physical Education Program," Athletic Journal, 16:3:22, January, 1936.

Explains how the performers select their own committees in his school circus. Offers valuable ideas regarding floor management, publicity, business, and make-up. Suggests adding two or three new apparatus events each year.

_____, "The F. S. U. Circus," Journal of Health, Physical Education, and Recreation, 21:9:9, November, 1950.

Describes the history and purposes of the noted circus at Florida State University.

Hensley, Ralph E. and Farnsworth, Eldridge, "Play Night or Circus---Which?" Recreation, 32:10:569, January, 1939.

An account of the troubles that arose from annual circuses, and why play nights were substituted.

_____, "Don't Double Your Show," Recreation, 31:8:495, November, 1937.

Tells of the danger that arises when a director becomes too ambitious in staging large circuses. Parents, leaders, and children all have too much work to do if this mistake is made.

Jackson, Chester G., "The School Circus; Its Place in Physical Education," Journal of Health and Physical Education, 3:3:12, March, 1934.

A history of the University of Illinois circus. Most of the activities presented were taught in the service physical education classes. This circus required the coordination of

many campus organizations. Helpful principles are listed as well as splendid photographs of performers on the slack wire, trapeze, rhon red, ladders, and perch pole.

_____. "Suggested Programs for Demonstrations and Exhibitions." Journal of Health and Physical Education, 8:2:84, February, 1937.

Cites several programs that have been successful both in high schools and colleges. Good pictures of ladder walking, trapeze, globe walking, aerial ladders, and panoramic views of the circus.

Kelly, Francis. "Circus is Coming to Town." Travel, 77:3:7, July, 1941.

A history of the circus. Beautiful photographs of clowns, the tight wire, and the trapeze.

Koss, D. H., "Join the Circus Without Leaving Home; Big Top Garden Party for Sixty Children." American Home, 12:3:143, August, 1934.

Tells how a parent organized a community circus within her neighborhood block to give fifty children fun, and at a total expense of less than eight dollars.

Noble, Virgil J., "Balancing the School Budget With a Circus." Athletic Journal, 18:5:16, January, 1938.

Five thousand people attended the two day circus of South Intermediate High School of Saginaw, Michigan; and ten thousand attended the following year. The success was due mainly to publicity, especially hand-bills. The money was used for the purchase of gym suits and a sound projector.

"Presenting the Gainesville Community Circus." Rotarian, 55:6:20, June, 1941.

Excellent photographs showing this circus in action.

Price, Hartley C., "Gymnastic Exhibitions." Scholastic Coach, 4:6:10, February, 1945.

Photographs of U. S. Navy men doing chair, table, and barrel balancing. Suggests the following principles for the presentation of a good show: keep it short to sustain audience interest, emphasize stunts within the ability of the performers, costume effectively, provide suitable music and lighting, and observe safety rules.

Vonier, Chet. "Circus Town. Public Course in Becoming a Circus Performer." American Magazine, 144:48:48, August, 1947.

Splendid photographs of the Manitowoc, Wisconsin community circus performers on the teeter board, roller skates, and balancing tables.

Wettstone, Eugene. "Streamlining the Home Show." Journal of Health and Physical Education, 12:8:456, October, 1941.

Exceptional pictures for stimulating interest in the iron jaw, trapeze, clowning, and balancing. To improve the school exhibition, he suggests that: it should have a meaningful theme, be coeducational if possible, should not take too much of the student's time, "live" music should be used instead of "canned," some numbers should be saved for future years, and the program should not exceed one and one half hours.

C. UNPUBLISHED MATERIALS

Gray, Miriam. "Windows to Physical Education." Unpublished Doctor's dissertation, Columbia University, New York, 1943. The essential points have been covered in the annotation of her book The Physical Education Demonstration which is the popular version of the dissertation.

COMEDY

A. BOOKS

Coplan, Maxwell. Pink Lemonade. New York: Mc Graw Hill Book Company.
Brief history of the circus. Full page pictures of clowns that will give ideas for make-up.

Mc Vicar, J. W.. The 1936. 1937. 1938. 1939. 1940. 1941. and 1942 Editions of Thirty Successful Clown Acts. Toronto, Canada: Central Y. M. C. A.
These editions were printed each year but are now out of print. Excellent material for the exhibition.

Recreation Division of the Chicago Park District. Clown Costumes and Make-up. Chicago: Recreation Division of the Chicago Park District, 1938. 20 pp.
Good suggestions and pictures describing the application of clown make-up.

_____. Clowning. Chicago: Recreation Division of the Chicago Park District, 1938. 44 pp.
Helpful hints for comedy stunts.

B. PERIODICALS

Ballentine, R., "It's a Clown's Life." Colliers, 119:16:22, April 19, 1947.
Excellent colored drawings of Ringling Brothers clowns showing their make-up to the best advantage.

Bragdon, Claude. "Clowns and Clowning," Outlook, 151:13:490, March 27, 1929.

Tells how the clown depends upon movement; things are his nouns, his actions are his verbs. He must do everything different from the normal way, yet accomplish the same result.

De Groat, H. S., "Hints from Pioneer Experiences," American Physical Education Review, 30:8:454, October, 1925.

Describes good clown stunts that are easy to perform. One of the best articles in the literature.

Dillinger, Norman A., "Burlesque Bull Fight for an Amateur Circus," Journal of Physical Education, 25:8:155, April, 1928.

Good description of a bull fight in which humans represent the animals.

Field, David A., "Gymnastic Buffoonery," Athletic Journal, 30:9:32, May, 1950.

Gives descriptions of comedy stunts that have been found to be successful on the horizontal bar, parallel bars, and trampolines.

Henderson, H. and Shaw, S., "Pool School; Rosalie School for Clowns," Colliers, 116:4:22, July 28, 1945.

Excellent cover photograph of Emmet Kelley and Lou Jacobs, noted circus clowns. Tells of the Chicago school which was established for schooling clowns.

Judd, Leslie J., "Here Come the Clowns," Scholastic Coach, 8:7:6, March, 1939.

Good suggestions for make-up and costumes for school clowns.

Mc Clow, L. L., "Clown Tumbling Stunts," Journal of Health and Physical Education, 2:1:36, January, 1931.

Stick figures showing comic one and two man tumbling stunts.

_____, "Clown Tumbling Stunts," Journal of Health and Physical Education, 2:2:32, February, 1931.

Stick figure drawings of clown stunts using tables, chairs, and barrels.

EXHIBITIONAL DRILLS

A. BOOKS

FM 21-20 Physical Training. Washington, D. C.: U. S. Government Printing Office, 1946. 392 pp.

Several chapters showing drawings of free calisthenic movements, calisthenics with rifles and logs; all of which could be adapted to school exhibitions.

Loken, Newton C. and Grambeau, Rodney J., Marching and Marching Drills. Ann Arbor, Michigan: Overbeck Publications, 1949. 37 pp.
Fundamentals of basic marching steps and several advanced drills.

Staley, Seward C., Calisthenics. New York: A. S. Barnes and Company, 1935. 338 pp.
Many varieties of calisthenic movements, and both elementary and advanced marching movements.

B. PERIODICALS

Altmann, George, "Obligatory Wand Exercises of the Young Men's Classes (Actives) at the National Turnfest in Denver," Mind and Body, 20:218:51, April, 1913.
Illustrated calisthenic exercises.

Globisch, A. W., "Lantern March for Juniors," Physical Training, 21:5:189, March, 1924.
An excellent description of marching with Japanese lanterns that produce weird night lighting effects.

Matousek, Rudolph J., "Glamorized Calisthenics," Journal of Physical Education, 40:1:8, September-October, 1942.
Tells of the value of presenting calisthenics with music.
Lists appropriate records.

"Obligatory Tactics and Free Exercises for 33rd National Turnfest, Louisville, Kentucky," Mind and Body, 33:348:7.
Good pictures of all calisthenic exercises used in the Turner's routines.

Seikel, George, "Wand Exercises for Senior Men's Classes," Mind and Body, 24:262:259, October, 1917.
Illustrated wand exercises and suggested musical accompaniment.

Seuse, W. C., "Wand Exercises for the Senior Men's Classes," Mind and Body, 16:180:134, June, 1909.
Briefly illustrated wand drills.

Stecher, Armin, "Obligatory Exercises," Mind and Body, 21:230:163, June, 1914.
Brief calisthenic routine.

"Sweden Holds Gymnastic World Series," Life, 27:7:21, August 15, 1949.
Pictures showing mass drills done at the Second Lingiad.

Williams, Leila, "Marching Drill for a Class of 32 Pupils," Mind and Body, 23:249:112, May, 1916.
Excellent diagrams of fancy marching maneuvers.

HAND BALANCING

A. BOOKS

Boyer, E. F., Acrobatics for All. Chicago: University of Chicago Press, 1947. 123 pp.

Well illustrated book describing doubles and triples adagio movements and methods of instruction. Especially interesting for his "production line" method of teaching fundamentals.

La Porte, William R. and Renner, Al B., The Tumbler's Manual. New York: Prentice-Hall, Inc., 1946. 122 pp.

Approximately half of the book is devoted to doubles balancing or pitch tumbling. Offers sound pointers on spotting and teaching techniques.

Mc Clow, L. L. and Anderson, D. W., Tumbling Illustrated. New York: A. S. Barnes and Company, 1931. 212 pp.

One of the best books presenting stick figure drawings of doubles and triples tumbling stunts on elementary and advanced levels.

Paulinetti, Philip H., True Art and Science of Singles Hand-balancing and Head to Hand Balancing. Philadelphia: George D. Lamb and Son, 1931. 95 pp.

An outstanding book for very advanced performers. Profusely illustrated though few teaching suggestions.

U. S. Naval Institute, Gymnastics and Tumbling. New York: A. S. Barnes and Company, 1944. 472 pp.

About ten pages are allotted to beginning and intermediate doubles and triples balancing stunts.

York Handbalancing. York, Pennsylvania: York Barbell Company, 1946. 64 pp.

Descriptions of advanced hand balancing stunts.

B. PERIODICALS

Miller, Jack, "Balancing," Scholastic Coach, 18:9:18, May, 1949.

Techniques for learning the head balance and the hand balance on the ground.

Price, Bartley C., "Handbalancing," Athletic Journal, 18:4:28, December, 1937.

Pointers on the squat balance and hand balance.

_____, "Advanced Handbalancing," Athletic Journal, 18:5:13, January, 1938.

Illustrations and instructions for doing the following forms of hand balances: parrot, one hand, planche, German, and

free head balance.

_____, "Fundamentals of Doubles Handbalancing." Athletic Journal, 18:6:28, February, 1938.

Discusses the physical qualifications of the top-mounter and the understander. Describes fundamental grips and balances. Well illustrated.

_____, "Handbalancing Routines." Athletic Journal, 18:7:16, March, 1938.

Suggests advanced doubles balancing routines and explains the importance of smoothness of routines to provide an adequate rest for each performer.

_____, "Advanced Triples Balancing." Athletic Journal, 19:5:24, January, 1939.

Valuable hints for staging a triples balancing act. Well illustrated. Emphasizes saving the best stunt until last, and using only those stunts that have been perfected.

HORIZONTAL BAR

A. PERIODICALS

Mc Culloch, J. H., "Natural Activities on Apparatus." Journal of Health and Physical Education, 1:1:40, January, 1930.

Helpful pointers in caring for the hands. Diagrams of low horizontal bar vaults.

Miller, Jack, "High Bar Stunts." Scholastic Coach, 19:6:12, February, 1950.

Good for elementary maneuvers such as knee and hip circles.

Price, Hartley O., "The Low Horizontal Bar." Athletic Journal, 20:7:22, March, 1940.

Good pictures and descriptions of stunts to be learned on the low horizontal bar.

_____, "High Horizontal Bar." Athletic Journal, 20:8:19, April, 1940.

Stresses good form on the bar. Explains difficult mounts, dismounts, and various types of giant swings.

B. UNPUBLISHED MATERIALS

Harris, Ralph Clinton, "A Cinematographical Study of the Upstart on the High Horizontal Bar." Unpublished Master's thesis, Springfield College, Springfield, Massachusetts, 1939, 128 pp. Photographic evidence backed by basic physics principles for the correct method of executing a kip on the high horizontal

bar. Best performers show a swing of fifty degrees both forward and backward, body arched at the end of the forward swing, toes brought to the bar, a hesitation until the arms come directly under the bar, and then the important leg thrust. Pictures show how both the successful and unsuccessful attempts were made.

Shay, Clayton. "Part Versus Whole Methods of Learning in Gymnastics." Unpublished Master's thesis, Syracuse University, Syracuse, New York, 1934.

Found that in learning the kip on the horizontal bar, it took 38.5 trials as an average when the whole method was used as compared to 48.8 trials when the part method was used. Sixteen inexperienced college men were used as subjects. The Physical Fitness Index correlated .82 with the number of trials, Strength Index .78, and the Brace Motor ability test .52.

INDIAN CLUBS

A. BOOKS

Warman, Edward. Indian Club Exercises. New York: American Sports Publishing Company, 1926. 155 pp.
Rather well illustrated club swinging maneuvers.

B. PERIODICALS

Bosenhard, Edward T., "Electric Light Clubs." Physical Training, 10:7:232, May, 1913.

The author shows how lighted Indian clubs are made.

_____, "Electric Light Clubs." Mind and Body, 20:225:411, January, 1914.

Explains how electric lights are inserted in Indian clubs.

Mc Clow, L. L., "Illuminated Indian Club Drill." Physical Training, 20:4:149, February, 1923.

Good explanation of the method of using sparklers in place of Indian clubs.

Paskovsky, Joseph, "Club Swinging--Snake Swings." Mind and Body, 25:267:23, March, 1918.

Good illustrations for basic club swinging.

Seuss, M. C., "Mass Club Exercises for the Women's Classes." Mind and Body, 16:180:137, June, 1909.

Illustrated women's Indian club exercises.

JUGGLING

A. PERIODICALS

Giallombardo, Joe, "The Art of Juggling," Athletic Journal, 29:6:22, February, 1949.

Profusely illustrated two and three ball juggling. Excellent suggestions for the progression of juggling stunts as done by physical education classes at New Trier High School, Winnetka, Illinois.

Knapp, Clyde G. and Dixon, W. Robert, "Learning to Juggle; a Study to Determine the Effect of Two Different Distributions of Practice on Learning Efficiency," Research Quarterly, 21:3:331, October, 1950.

Found that men students practicing five minutes each day learned to juggle three balls one hundred times about twice as fast as those practicing fifteen minutes every other day. The latter group used fewer periods, however.

PARALLEL BARS

A. PERIODICALS

Miller, C. E., "Vaulting Stunts Over Parallel Bars," Scholastic Coach, 20:2:32, October, 1950.

Good photographs of the stunts as well as safety precautions.

Price, Hartley O., "Elementary and Intermediate Parallel Bars," Athletic Journal, 22:5:11, January, 1942.

Advises a series of progressive stunts at first until the gymnast reaches a certain stage which will allow him to proceed with stunts he is most interested in learning. Suggests routines for intermediate work.

_____, "Advanced Parallel Bars," Athletic Journal, 22:6:6, February, 1942.

Classifies advanced stunts according to (1) mounts, (2) dismounts, (3) somersaults above the bar, (4) somersaults below the bar, (5) balances, and (6) changes of direction. Excellent pictures accompany the descriptions.

PYRAMIDS

A. SCORES

Cromie, William J., Pyramid Building. New York: American Sports Publishing Company, 1936. 95 pp.

Excellent pictures of ground, ladder, wand, and chair pyramids. Some of the most artistic pyramids reviewed.

Macher, W. and Richards, J., Pyramids Illustrated. New York: A. S. Barnes and Company, 1932. 190 pp.

Descriptions of pyramids using all types of gymnasium apparatus.

Mc Clow, L. L., Pyramids Illustrated. New York: A. S. Barnes and Company, 1931. 190 pp.

Paskovsky, Joseph, Complete Method of Pyramid Building. Chicago: Rusta and Mojdrich, 1919. 111 pp.

Using one, two, three, and four ladders for all pyramids as well as all the apparatus, the author makes beautiful pyramids. Marching pyramids are also described.

Rodgers, Martin, A Handbook of Stunts. New York: The Macmillan Company, 1932. 515 pp.

An outstanding book that gives numerous stick figure drawings for many ground pyramids that have been arranged according to the number of persons participating.

B. PERIODICALS

Andresen, J. S., "Pole Pyramids," Physical Training, 14:2:93, December, 1916.

Novel pyramids using poles to make a cross, cross-roads, pillars, and a baseball diamond.

"Ladder Pyramids," Mind and Body, 20:225:420, January, 1914.
Four photographs of ladder pyramids.

Langton, Clair V. and Mauthe, C. C., "Some Pyramids For Your Demonstration," Journal of Health and Physical Education, 1:1:32, January, 1930.

Excellent intermediate ground pyramid drawings.

Price, Hartley O., "Fundamentals of Pyramid Building," Athletic Journal, 19:6:20, February, 1939.

Numerous pictures showing good end and center positions. Also offers hints for making elementary pyramids.

_____, "Ground Pyramids," Athletic Journal, 19:7:18, March, 1939.

Ground pyramids are defined as those built on the floor without the use of equipment. They are usually convex. Advanced pyramids are illustrated.

"Pyramids for Twelve Men," Mind and Body, 34:348:24, April, 1927.

Five effective pyramids using a large ring for a base.

Schrader, Carl L., "Carnival Customs and Frolics," Journal of

Health and Physical Education, 9:4:214, April, 1938.
Excellent photographs that show how pyramids were formed in ancient days. Tells how the people living in those days made use of acrobatic stunts at their celebrations.

ROPE CLIMBING

A. PERIODICALS

Kegel, Carl W., "Our Aid--The Ropes," Journal of Health and Physical Education, 11:9:551, November, 1940.
Offers suggestions for interesting stunts in rope climbing, and shows various ways in which the rope may be climbed.

Reuter, H. C., "Climbing Exercises on Apparatus," Journal of Health and Physical Education, 6:8:36, October, 1935.
Pictures of challenging stunts on the ropes, ladders, climbing poles, and ropes.

Wettstone, Eugene, "Give Them Enough Rope," Scholastic Coach, 14:3:9, November, 1944.
Advises rope climbing as a means of physical conditioning. Discusses the proper techniques for climbing, and shows numerous pictures of novel stunts to be done on the ropes.

ROPE JUMPING AND ROPE TWIRLING

A. BOOKS

Mason, Bernard, Roping. New York: A. S. Barnes and Company, 1940. 138 pp.

Nearly anything the amateur would want to know about rope spinning from basic stunts through the most advanced ones.

_____, Primitive and Pioneer Sports. New York: A. S. Barnes and Company, 1937. 342 pp.

Darts, spinning the serpentine, whip cracking, lariat throwing, roping, and boomerang throwing are all well illustrated and explained in this superior book.

B. PERIODICALS

Anderson, Theresa, "Rope Jumping," Journal of Health and Physical Education, 15:4:196, April, 1944.

Novel group rope jumping exercises. Suggests a small rope of nine feet in length and a diameter of three eighths of an inch. The larger ropes should be twenty five feet long and one half inch in diameter.

Betz, Josephine, "Girls and Lariats." Journal of Health and Physical Education, 11:4:228, April, 1940.

Shows how beneficial and inexpensive rope twirling is for a girls physical education class. Little space is needed, has a carry over value, and it may be imaginative. Suggests a sixteen foot number ten sash cord, and tells how to make the hondo with eighteen inches of spool copper wire around the rope at one half inch intervals.

Entz, Marjorie and Witten, Harriett, "Entertainment--Western Style," Journal of Health, Physical Education, and Recreation, 20:9:575, November, 1949.

Shows how rope spinning has been incorporated into marching and intermission activities at Mesa High School; Mesa, Arizona.

Mason, Bernard, "Fun With a Lariat," American Boy, 29:9:30, July, 1928.

The author illustrates fundamental rope spinning using a number twelve sash cord and three eighths inch rope.

_____, "Fun With a Lariat," American Boy, 29:10:39, August, 1928.

More advanced spinning stunts.

_____, "Fun With a Lariat," American Boy, 29:11:60, September, 1928.

Advanced rope spinning.

Melby, Rolf E., "Rope Jumping," Journal of Health and Physical Education, 7:2:93, February, 1936.

Lists the values of rope jumping as: leg and arm development, rhythm, organic development, and a natural expression for physical vigor. Gives excellent suggestions for individual stunts and routines as well as methods for making the rope.

Rogers, Annette J. and others, "Rope Skipping," Springfield, Illinois: Department of Physical Education, Office of Public Instruction, 1945. 6 pp.

STATUARY

A. BOOKS

Olds, Lloyd E., Living Statuary. Ypsilanti, Michigan: Physical Education Department, Michigan State Normal College, 1930. 16 pp.

Complete description of make-up for marble and bronze statuary numbers. Excellent photographs. Tells of the precautions that should be used.

B. PERIODICALS

Brown, Margaret C., "Sculpture and Physical Education," The Physical Educator, 1:1:3, October, 1940.
Excellent statuary poses from the Greek, Roman, and Medieval eras.

Gleboch, A. W., "Statuesque Posing," Physical Training, 14:9:427, September, 1917.

Marble makeup is made of alabastine and glycerine mixed with hot water. Sugar is dissolved in water to lend greater adhesiveness to the mixture. It should be applied with a soft brush after it dries white powder should be applied.

_____, "Statuesque Posing," Mind and Body, 24:263:321, November, 1917.

Explains the formula for bronze and marble make-ups. Suggests a platform to be used for the demonstration.

Journal of Health and Physical Education, 15:2, February, 1944.

The entire periodical is devoted to the works of R. Tait Mc Kensie, noted sculptor. The photographs of his work will give excellent ideas of athletic poses which may be adapted to statuary work.

Judd, Leslie J., "Individual and Group Tableaux," Scholastic Coach, 7:6:12, February, 1938.

Excellent athletic poses. Tableaux must express beauty and emotions. Greek and Roman poses are suggested so long as simplicity is emphasized. The ingredients are: one ounce of aluminum bronze to three ounces of glycerine for one person. It should not be placed under the arm pits or in the crotch. He offers suggestions for the most effective lighting.

Mc Kensie, R. Tait, "Some Studies in the Sculpture of Athletes," Journal of Health and Physical Education, 6:7:9, September, 1935.

Good ideas for athletic poses.

_____, "The Athlete in Sculpture," Journal of Health and Physical Education, 3:9:41, November, 1932.

Excellent poses of athletes in action as portrayed by the sculptor.

Olde, Lloyd W., "Living Statuary," Journal of Health and Physical Education, 1:4:12, April, 1930.

Splendid photographs of marble athletic statuary. The author recommends blue lights and velvet draps with appropriate music. The formula he recommends for marble statuary for one person is one pound of orisec heated until it is a liquid. Add one pound of zinc oxide, and mix. Cool, and apply with the hands. Apply Stein's number one white powder in a muslin

oak and dust. A wig mask can be made of a felt hat. The top surface is covered with glue and cotton.

_____. "Living Statuary." Journal of Health and Physical Education. 20:2:87, February, 1949.

Beautiful photographs of athletic statuary poses. The author tells of the importance of selecting the most suitable persons for the various positions. There should be a maximum of twelve poses or scenes. Blue lights should be used with marble white statuary and straw colored lights for bronze numbers. He gives the exact details for the application of both marble and metallic bronze make-up.

Shetzbarger, Clyde R.. "Torship and Devotionals." Journal of

Physical Education. 41:4:65, March-April, 1944.

Pictures of statuary scenes of the last supper, Oedipus and the crucifixion.

TRAMPOLINES

A. BOOKS

Oriswell, Larry. Trampoline Tumbling. St. Louis: Fred McDart Manufacturing Company, 1948. 120 pp.

Basic and very advanced stunts are all described by one of the leading trampolinists. Stunts are listed in a progressive order. Two and three man stunts are described, and a comedy routine is suggested.

B. PERIODICALS

Hutton, Charles E.. "A New Use for an Old Device; The Trampoline for Sport." Journal of Health and Physical Education, 19:4:252, April, 1942.

Explains how a trampoline may be made, and describes basic stunts.

Price, Harvley O. and Loken, Newton C.. "Trampoline Stunts in Naval Aviation." Scholastic Coach, 12:6:12, February, 1943.

Thirty good photographs of trampoline stunts and accompanying descriptions. Discusses the values of gymnastics and trampolining in relation to the Navy physical fitness program.

_____. "Dual Trampolining for Conditioning." Scholastic Coach, 12:7:12, March, 1943.

Thirty photographs of two and three man stunts, all of which are adaptable for exhibitional purposes.

Notetone, Eugene. "Tips of Trampolining." American's Newest Sports.

Athletic Journal, 22:5:11, January, 1942.

Excellent photographs and coaching pointers that explain how

trapolining aids both the tumbler and the diver.

C. UNPUBLISHED MATERIALS

Loken, Newton C., "The Order and Grade of Trampoline Stunts According to their Difficulty." Unpublished Master's thesis, University of Michigan; Ann Arbor, Michigan, 1946, 108 pp. The author sent questionnaires to leading trampoline authorities. He learned that there was reasonable agreement on the degree of difficulty for the first five and the last three stunts in each of five progressive stages of difficulty (ten stunts in each classification). The consensus of opinion was that trampoline scoring should be similar to that of tumbling rather than that of diving.

TRAPEZE

A. BOOKS

Ripley, William. Professional Gymnastic Acrobats. New York: Peck and Snyder, 1879. 101 pp. Stunts for the trapeze, perch pole, rolling globe, and ladders are described.

B. PERIODICALS

Cooper, Courtney R. and Codona, A., "Taking the Fall." Saturday Evening Post, 203:35:12, February 28, 1931. A story of the perseverance a professional trapeze artists needs. Emphasis on the ability to know how to fall correctly.

Jackson, Chester O., "An Experimental Study of the Effect of Fear on Muscular Coordination," Research Quarterly, 4:4:71, December, 1933. This is the abstract of a Master's thesis written at the University of Illinois. Fear on the flying trapeze is usually due to: height, inadequate support, and imagination. The catcher is the most important factor in the presence or absence of fear. Fear is usually associated with new stunts and those in which people have been injured. Stunts on the trapeze are learned with this procedure: observation, explanation, demonstration, and trial.

TUMBLING

A. BOOKS

Cottarel, Bonnie and Donnie, The Teaching of Stunts and

Tumbling. New York: A. S. Barnes and Company, 1936. 337 pp.
Excellent for both single and combination tumbling. A comprehensive history of tumbling.

Harby, S. F.. Tumbling for Students and Teachers. Philadelphia: Saunders and Company, 1932. 212 pp.
Excellent for both single and combination tumbling both from the standpoint of the beginner and the advanced student.

Horne, Virginia. Stunts and Tumbling for Girls. New York: A. S. Barnes and Company, 1943. 220 pp.
Excellent pictures and explanations of single and double tumbling stunts, pyramids and class administration procedure.

La Porte, W. R. and Renner A.. The Tumbler's Manual. New York: Prentice-Hall Inc., 1938. 122 pp.
Diagrams drawn from movies that had been corrected by national tumbling authorities. Good descriptions of single and double tumbling and techniques for teaching groups.

Mc Clow, L. L.. Tumbling Illustrated. New York: A. S. Barnes and Company, 1931. 212 pp.
This reference should be in everyone's library. Superior source for all forms of comedy and exhibitional tumbling.

U. S. Naval Institute. Gymnastics and Tumbling. New York: A. S. Barnes and Company, 1944. 472 pp.
Previously annotated. About forty pages are devoted to illustrations of tumbling stunts.

U. S. War Department Manual FM 21-20. Washington: U. S. Government Printing Office, 1946. 392 pp.
Approximately thirty pages are devoted to lucid explanations of both single and double tumbling stunts.

B. PERIODICALS

Barkdoll, O. R., "Aids for the Beginning Tumbler." Journal of Health and Physical Education. 12:8:13, April, 1943.
Practical suggestions for the construction of home made equipment to assist the tumbler in learning the cartwheel, back handspring, somersault, and front handspring. Highly recommended.

_____, "Aids for the Beginning Tumbler." Scholastic Coach. 12:7:16, March, 1943.
Describes unique equipment for the teaching of the head balance, hand balance, and the hand walk.

Boyer, Ervin F., "Campus Aerobatics." Physical Education. 86:124:128, September, 1946.
Tells how tumbling is taught with the group method. A novel

group diving stunt is illustrated.

Hall, Bowman W., "Organization for Tumbling." Scholastic Coach, 15:4:30, December, 1945.

Tells of the value of tumbling, and offers instruction for stunts which have been listed in a progressive order.

Hall, Harry R., "Mat Work in High Schools." School (Sen. Ed.), 30:5:432, January, 1942.

Instruction for fundamental tumbling stunts from the front roll through the back handspring. Valuable remarks for the administration of a tumbling class.

Price, Hartley O., "Elementary Balancing and Tumbling." Journal of Health and Physical Education, 9:2:100, February, 1938.

Pictures and techniques of elementary stunts such as: back and forward rolls, head balance, cartwheel, hand balance, and handsprings.

_____, "Advanced Tumbling." Athletic Journal, 17:6:11, February, 1937.

A background of amateur tumbling in America. Also, suggestions for learning various types of somersaults.

_____, "More About Advanced Tumbling." Athletic Journal, 17:6:20, April, 1937.

Tells of techniques that develop advanced tumbling routines with tinsicas, brandies, baronies, butterflies, etc.

Wettstone, Eugene, "Introduction to Schoolboy Tumbling." Scholastic Coach, 10:6:11, February, 1941.

Practical suggestions for the promotion of tumbling. Explains ways in which mats and lunging belts are used for protecting performers.

_____, "Elementary Schoolboy Tumbling." Scholastic Coach, 10:7:21, March, 1941.

Word and picture explanations of forward and backward rolls, handspring, round-off, and somersaults. Routines are also covered.

_____, "Advanced Schoolboy Tumbling." Scholastic Coach, 10:8:11, April, 1941.

The author believes that the somersault separates the beginning tumbler from the advanced tumbler. Gives techniques for somersaults, Arabian tumbling, twists, and routines.

_____, "Cheerleaders Should be Acrobats." Scholastic Coach, 12:1:15, September, 1942.

Excellent illustrations and suggestions for the improvement of cheerleading through tumbling.

C. UNPUBLISHED MATERIALS

Heidloff, Raymond Conrad. "A Logical Application of Physics to Selected Tumbling Stunts." Unpublished Master's thesis. Springfield College; Springfield, Massachusetts, 1938. 103 pp. The author applies the principles of physics and cinematography to provide a better understanding of the correct techniques of teaching the front and back handsprings and front and back tuck somersaults. Blueprint diagrams show the correct methods as executed by two champions.

Renner, Al. "An Illustrated, Graded, Standardized Curriculum of Group Units in Tumbling for the Secondary School Level." Unpublished Master's thesis. University of Southern California; Los Angeles, California. 1936. 143 pp. Movies were used with corrected drawings to formulate a scientific single and group tumbling program. Excellent for elementary and intermediate work of this nature. This thesis was the basis for the Tumbler's Manual described on page 165.

WIRE WALKING

A. PERIODICALS

Bradna, Fred and May, E. D.. "Circus Dare Devils." Popular Science, 123:2:22, August, 1933.

Tight wire and rooking table photographs are shown to give the reader an excellent idea of the way the equipment is made.

IDEAS FOR THE MAKING OF EQUIPMENT

A. PERIODICALS

Ballantine, Bill. "Circus." Holiday, 3:5:100, May, 1948.

Excellent colored photographs of Ringling Brothers circus acts showing: clowns, trapeze, risley, hand balancing, risley, unicycle, and Spanish web equipment.

"Circus Daredevils in the Making." Popular Mechanics, 62:1:44, July, 1934.

Shows an iron jaw rigging for three performers. Sound advice for safety measures for such an act.

Force, E.. "Home Town Show; Gainesville Community Circus."

Saturday Evening Post, 215:6:14, August 8, 1942.

Colored photographs showing numerous activities of this famous amateur circus.

Mc Nealey, Simon A., "Helps Children Grow," Education Briefs, October, 1948, p. 16.

One of the best sources for the making of playground swings, parallel bars, horizontal ladders, rings, and trapezes.

"New York Turnverein Olympic Balance Beam," American Turner Topics, 14:5:8, January, 1950.

A detailed description of the construction of a balance beam.

"Risley: Four Daring Young Men Do Acrobatic Miracles," Life, 9:19:45, November 4, 1940

Good action photographs showing the construction of a risley cushion and stunts done by the Whitson Brothers.

Smith, A. Morton, "World's Strangest Circus Produced by Amateurs," Popular Science, 125:5:49, November, 1944.

Good photographs of the trapeze and iron jaw numbers in the Gainesville Community Circus.

_____, "Man Who Builds the Flying Trapeze," Popular Science, 127:7:34, October, 1935.

Shows the work shop of the late Edward Van Wyck, maker of circus equipment. Gives advice on the material that should be used in the construction of the tight wire.

Stinson, T. M. Jr., "Home Town Circus in Gainesville, Texas," Popular Mechanics, 86:6:153, December, 1946.

Pictures of stilts and ladder walking acts.

"They Fly Without Wind," Popular Mechanics, 72:3:402, September, 1939.

Trapeze rigging photographs. Explanation of the dangers of the crystallization of metal equipment.

B. GOVERNMENT PUBLICATIONS

"Homemade Physical Education Equipment," Springfield, Illinois: Department of Health and Physical Education; Office of the Superintendent of Public Instruction, 1946, 11 pp.

Describes how to construct outdoor parallel bars, chinning bars, horizontal bars, rings, and other physical education apparatus.

APPENDIX

APPENDIX

A SELECTED LIST OF COMPANIES THAT MANUFACTURE EXHIBITIONAL GYMNASTIC EQUIPMENT

East Stroudsburg Lumber Company, Inc.
226 Washington Street; East Stroudsburg, Pennsylvania
Indian clubs.

Harry H. Lind
66 North Hanford Street; Jamestown, New York
Juggling equipment.

Fred Medart Manufacturing Company
Potomac and De Kalb Streets; St. Louis, Missouri
All types of school gymnastic apparatus.

Narragansett Machine Company
5 Sabin Street; Pawtucket, Rhode Island
All types of school gymnastic apparatus.

Nissen Trampoline Company
200 A Avenue; Cedar Rapids, Iowa
Trampolines and trapezettes.

Petersen Mat Company
Armist and Baynton Streets; Philadelphia, Pennsylvania
Mats.

J. E. Porter Company
Ottawa, Illinois
All types of school gymnastic apparatus.

Carl Sahlen
727 Sweetser Avenue; Indianapolis, Indiana
All types of professional circus equipment.

Streholite Company
35 West 52nd Street; New York 19, New York
Fluorescent paint for night lighting effects.

York Barbell Company
York, Pennsylvania
Iron jaw mouth pieces and weight lifting equipment.