

THE TEACHING OF STUNTS AND TUMBLING



B. AND D. COTTERAL

The Teaching of
STUNTS AND TUMBLING

BY

BONNIE AND DONNIE COTTERAL

Texas State College for Women
North Texas State Teachers College

AUTHORS OF

•• *Tumbling, Pyramid Building and Stunts*
for Girls and Women

WITH AN INTRODUCTION BY

JESSE FEIRING WILLIAMS, M.D.



NEW YORK

A. S. BARNES AND COMPANY

INCORPORATED

Copyright 1936 by
A. S. BARNES AND COMPANY
INCORPORATED

This book is fully protected by copyright and nothing that appears in it may be reprinted or reproduced in any manner, either wholly or in part, for any use whatever, without special written permission of the copyright owner.

Fifth Printing, October 1945

PRINTED IN THE UNITED STATES OF AMERICA.

FOREWORD

"THE TEACHING OF STUNTS AND TUMBLING" has been approached with a three-fold purpose in mind. The historical sketch is offered for the purpose of enlarging the student's knowledge of the cultural background of tumbling. This is in keeping with the trend for physical educators to enrich their activity program by giving their students appreciations of the racially old activities which they have inherited.

The principles and methods of teaching stunts and tumbling are presented with the view of aiding instructors to effectively realize the objectives set forth for the activities as part of the physical education program.

New stunt and tumbling material is included and suggestions are made for an increased range of uses of stunt and tumbling activities in the physical education program.

The authors express their sincere appreciation to John Martin and Nellie Cleveland whose helpfulness aided the research for the historical sketch, and to the following people for their contributions which assisted greatly the writing of the history of the teaching of stunts and tumbling in America:

Dr. William Gilbert Anderson, William Cromie, Dr. James T. Gwathmey, Norton H. Pe~rl, Ross Allen, C. O. Carlstrom, C. G. Glenn, J. I. Johnson, A. E. Kindervater, Helen McKinstry, Grover W. Mueller, Emil Rath, Floyd A. Rowe, Mazie Scanlan, and Dr. Carl B. Spath.

BONNIE AND DONNIE COTTERAL

CONTENTS

	CHAPTER X	PAGE
STUNTS		198
	CHAPTER XI	
STUNT AND TUMBLING GAMES AND RELAYS		231
	CHAPTER XII	
STUNT AND TUMBLING CONTESTS		264
	CHAPTER XIII	
STUNT AND TUMBLING MEETS		272
	CHAPTER XIV	
ORIGINAL PROJECTS		287
	CHAPTER XV	
STUNT AND TUMBLING DEMONSTRATIONS		297
BIBLIOGRAPHY		313
INDEX		321

CONTENTS

	PAGE
FOREWORD.	v
INTRODUCTION	xi
PART I	
THE TEACHING OF STUNTS AND TUMBLING	
CHAPTER I	
HISTORICAL SKETCH OF TUMBLING	1
CHAPTER II	
STUNTS AND TUMBLING AS ACTIVITIES IN THE MODERN PHYSICAL EDUCATION PROGRAM	, 42
CHAPTER III	
TEACHING PROCEDURES FOR STUNTS AND TUMBLING	49
CHAPTER IV	
ORGANIZATION FOR STUNT AND TUMBLING CLASSES	82
CHAPTER V	
THE USE OF STUNT AND TUMBLING MATERIAL	114
CHAPTER VI	
SUPERVISION OF STUNTS AND TUMBLING	132
PART II	
STUNT AND TUMBLING MATERIAL	
CHAPTER VII	
ROLLS	151
CHAPTER VIII	
DIVES	174
CHAPTER IX	
BALANCES	183

CHARTS

CHART	PAGE
I. ACHIEVEMENT CHART, CHECK SYSTEM	70
II. LADDER ACHIEVEMENT CHART	71
III. ACHIEVEMENT CHART FOR SKILLED DIVISIONS	89
IV. ACTIVITIES REQUIRING AGILITY	120
V. ACTIVITIES REQUIRING FLEXIBILITY	121
VI. ACTIVITIES REQUIRING BALANCE	122
VII. ACTIVITIES REQUIRING STRENGTH	128
VIII. ANALYSIS OF STUNT AND TUMBLING ACTIVITIES ACCORDING TO AGILITY, FLEXIBILITY, BALANCE, AND STRENGTH	124
IX. ApPLICATION OF THE CHARACTERISTICS OF STUDENTS TO THE TEACHING OF STUNTS AND TUMBLING	188
X. TUMBLING GOLF SCORE CARD	247
XI. SUGGESTED SCORE SHEET FOR TEAM REPRESENTATIVE CONTEST	269
XII. SCALE FOR JUDGING QUALITY OF PERFORMANCE.	275
XIII. SUGGESTED SCORING FORM FOR JUDGES OF STUNT AND TUM- BLING MEETS	285
XIV. SUGGESTED SCORING FORM FOR OFFICIAL SCORER OF STUNT AND TUMBLING MEETS	286
XV. DEMONSTRATION MASTER SHEET	800

TABLES

TABLE	
I. TRANSMUTATION OF RANK OF INDIVIDUAL ACTIVITIES INTO NUMERICAL SCORES	277
II. TRANSMUTATION OF RANK OF GROUP ACTIVITIES INTO NUMERI- CAL SCORES	279
III. NUMBER OF TRIALS RECOMMENDED FOR CONTESTANTS	284

ILLUSTRATIONS

PAGE

A SCENE IN AN ANCIENT EGYPTIAN TOMB DEPICTING TUMBLING, DANCING, AND JUGGLING •	2
WOMEN ACROBATS AT A RELIGIOUS RITE IN ANCIENT EGYPT	5
SALOME TUMBLING BEFORE HEROD •	19
A TUMBLING FEAT IN THE XIV CENTURY	26
TUMBLING WITH MUSICAL ACCOMPANIMENT IN THE XIV CENTURY	27

INTRODUCTION

PROGRESS in physical education has been so rapid in recent years that laymen have failed to grasp the remarkable change that is taking place, and even physical educators themselves find it difficult to keep up with the vigorous strides by leading groups in a wide variety of efforts in this very broad field. The altogether extraordinary development in modern dance, a movement of great vitality, has shown not only in urban and university centers, but also quite generally, an amazing vitality that indicates this to be more than a fad. The remarkable interest in swimming, the recreational programs developed in water sports, and the extension of aquatics from school to camp, from beach to pool, from colleges to communities are marks of the progress that is being made. It is not a matter of blame that citizens are scarcely aware of the change. It is difficult for them to conceive of physical education outside their own earlier experiences. These are generally none at all, or calisthenic drills, or a few boys on a school athletic team. As the larger functions of physical education in modern society have been understood and as competent leadership has appeared, progress has been inevitable. There is no forcing of the general situation even in the legislation for state-wide physical education for here is a phase of education that is essential in the development of children, that teaches skills that function in life, that promotes wholesome play attitudes, and that contributes to worthy social living.

One interesting development in the profession itself is the natural outcome of the scientific study of physical education. Today there are numerous illustrations, not only of scholarship in the materials of the field, but also that reaching out into related areas for truths or experiences that they may yield.

Less than twenty-five years ago there was practically no literature in America in physical education and the production was exceedingly slow. Today the professional journals are substantial publications, the books each year are exceedingly valuable, and the master's theses and doctor's dissertations are often superior contributions to the literature of education.

This progress in and development of the field is, I am convinced, not a superficial thing but evidence of deeper growth. It reflects professional preparation that today has gone past the stage of practice in technic only to include examination of fundamental problems in teaching. After the revolt against formalism in gymnastics, there was 'a period in physical education practice when it appeared that exact procedures, organized materials, aims, objectives and teaching methods had no place in a natural program of physical education. It has been difficult to combat that tendency but on every hand there is increasing evidence that how to teach has not been entirely forgotten.

Whatever one might wish to say about formal gymnastics -and surely all will speak kindly of the dead-it should never be forgotten that one item of excellence was teaching technic. The teachers of formal gymnastics knew how to begin a lesson, how to proceed, what to look for, and how to judge performance. In the reaction against the sterility of the formal material, these values' in method were often overlooked or forgotten. They are abiding values. in all teaching, in all times, and in all places.

It is a pleasant privilege to present to the profession this book on tumbling. The authors have shown in its pages and elsewhere the fruits of the scientific study of their field; they bring to an inherently interesting activity unusually rich suggestions for teaching. As one reads the pages of this book, the conclusion is bound to arise that many of the points in teaching method are sound, not only for tumbling, but also for other activities. The research necessary for the writing of the first chapter must have been laborious and yet to these students of their field wholly delightful. Even when the days come, when some

of us cease "to tumble" and "to dance violently," we can remain appreciative observers because there have been those teachers alert to the values of tumbling who are teaching it everywhere to youth.

JESSE FEIRING WILLIAMS

TEACHERS COLLEGE
November 1935

Date 4-21 1947

M Olin

No. _____

Reg. No. _____ Clerk _____

ACCOUNT
FORWARDED

1	<u>7 x Stunts</u>			
2				<u>285</u>
3				
4	<u>paper</u>			<u>30</u>
5				
6				<u>305</u>
7				
8				
9				
10				
11	<u>Kenneth A. Olin</u>			
12				
13				
14				
15				

22

Your account stated to date. If error is found return at once

The Teaching of **STUNTS AND TUMBLING**

CHAPTER I

HISTORICAL SKETCH OF TUMBLING

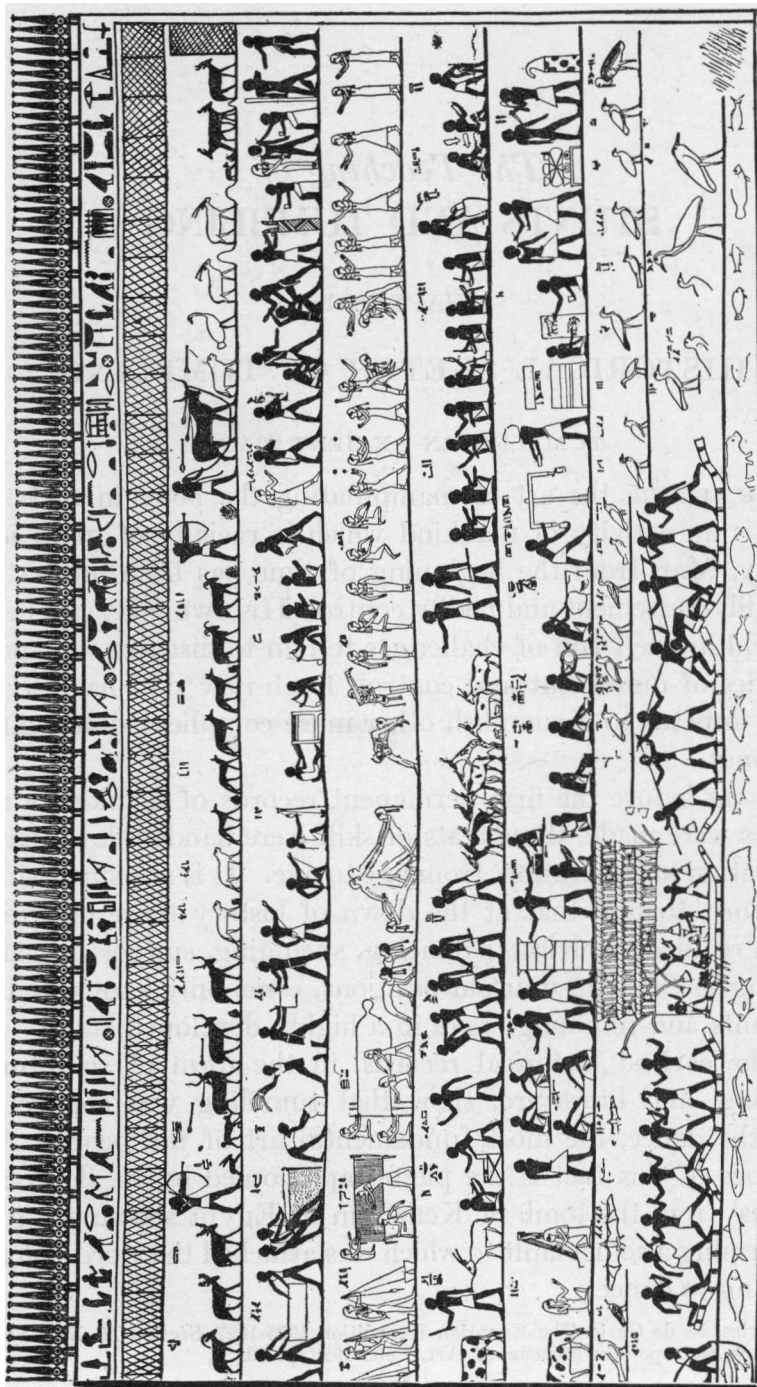
TUMBLING IN ANCIENT TIMES

TUMBLING, the art of manipulating the body in feats of skill, is an activity of mankind which is racially of great antiquity. Man from the beginning of time has been interested in bodily movement and bodily control. His own body has been a world in itself full of challenges to him to discover new possibilities of movement and control. Each new skill has served as an impetus to accomplish other more complicated and difficult ones.

Long before the first permanent records of mankind's activities were made, these feats of skill were handed down from generation to generation, from age to age. It is not surprising, therefore, to find that at the dawn of history those activities which require revolving, balancing, springing, supporting, and moving the body in unusual positions, commonly known today as stunts and tumbling, were in a highly developed stage.

The earliest historical records, in the form of sculpture, painting, and literature, show that tumbling was connected with the dance, the most fundamental art of the people. An evidence of this fact is the pictograph copied by N. de Garis Davies¹ from the tomb of Kenamun in Egypt showing a girl performing a somersault to which was attached the word "*bby*", meaning to dance.

¹ Davies, N. de Garis. The Egyptian Expedition 1925-1927, Section II. New York, New York Metropolitan Museum of Art, Feb., 1928, p. 60.



A Scene in An Ancient Egyptian Tomb Depicting Tumbling, Dancing, and Juggling

From "Benâ Hasan," Part II, by Percy E. Newberry, London.
Published under auspices of the Egypt Exploration Fund, 1893.

Courtesy of The Metropolitan Museum of Art

From ancient Greece, a passage in Homer's *Iliad* ¹ which describes the shield of Achilles, made by the god artist, Vulcan, at the request of Thetis, Achilles' mother, shows the close connection between tumbling and dancing.

"A figured dance succeeds; such once was seen
 In lofty Gnossus for the Cretan queen,
 Form'd by Daedalean art; a comely band
 Of youths and maidens, bounding hand in hand.
 The maids in soft simars of linens dress'd;
 The youths all graceful in the glossy vest:
 Of those the locks with flowery wreath enroll'd;
 Of these the sides adorn'd with swords of gold,
 That glittering gay, from silver belts depend.
 Now all at once they rise, at once descend,
 With well-taught feet; now shape in oblique ways,
 Confusedly regular, the moving maze:
 Now forth at once, too swift for sight, they spring,
 And undistinguish'd blend the flying ring.
 So whirls a wheel, in giddy circle toss'd,
 And, rapid as it runs, the single spokes are lost.
 The gazing multitudes admire around:
 Two active tumblers in the center bound;
 Now high, now low, their pliant limbs they bend:
 And general songs the sprightly revel end."

Dancing was one of the earliest means of expressing emotion and, therefore, was an integral part of the religious life of ancient peoples. With the growing of priesthood, professional dancing originated and professional dancers became attached to the temples.

The findings of N. de Garis Davies ² show that tumblers had a distinct place in this professional dance group in Egypt, "perhaps regarded as having reached the top of the profession, graceful dancers being many but female acrobats few." As such, the tumblers participated in religious ceremonies, including celebrations, processions, and funerals.

¹ Homer. *The Iliad*. Translated by Alexander Pope. New York, Thomas Crowell and Co. Book XVIII, p. 393.

² Davies, N. de Garis. *Op. cit.*, p. 64.

Drawings on the tombs give evidence that the majority of professional tumblers were women, "being chosen because they could be better spared, and because their suppleness, seeming 'weakness, and incommoding hair made their performance the stranger and wilder." ¹ N. de Garis Davies found that in the representations the "thick mass of hair hanging over the face is almost invariably the distinguishing mark of the female acrobat." ²

Though the place of the tumbler at religious ceremonies today could not be imagined, the reason for the ancient Egyptian tumbler filling such a position is explained by N. de Garis Davies: ³

"Cruder religions regard it as a merit to reach a physical rhapsody, a throbbing emotion, which as it is with difficulty excited in the crowd by the event or ceremonial alone, must be induced by the sight of rapid and violent physical action and the sound of strong, monotonous rhythm For this reason, perhaps, it was on solemn occasions in Egypt that the wildest physical displays were given that professional skill could provide To duller men the emotion called up by strong pulsation and whirling motion added to professional rites is conceived as a proper response to the superhuman, and is repaid by an extraordinary pleasure, so that amusement and worship are confusedly mingled. If the acrobat is given a place in religious ceremony, it must not be regarded as mere entertainment or as a simple-minded provision of laughter for the god or ghost It is the means of providing the proper quantity of emotion in the duller onlooker "The doors of heaven open and the god comes forth !," cry the girls and men as they dance, and it seems to have given the common person for once some inkling of the supernatural."

On several tombs in Egypt religious celebrations are depicted in which women tumblers are participating. N. de Garis Davies ⁴ describes a scene which appears on the wall of the temple of Deir el Bahri:

¹ Davies, N. de Garis. *Op. cit.*, p. 64.

² *Ibid.*, p. 62.

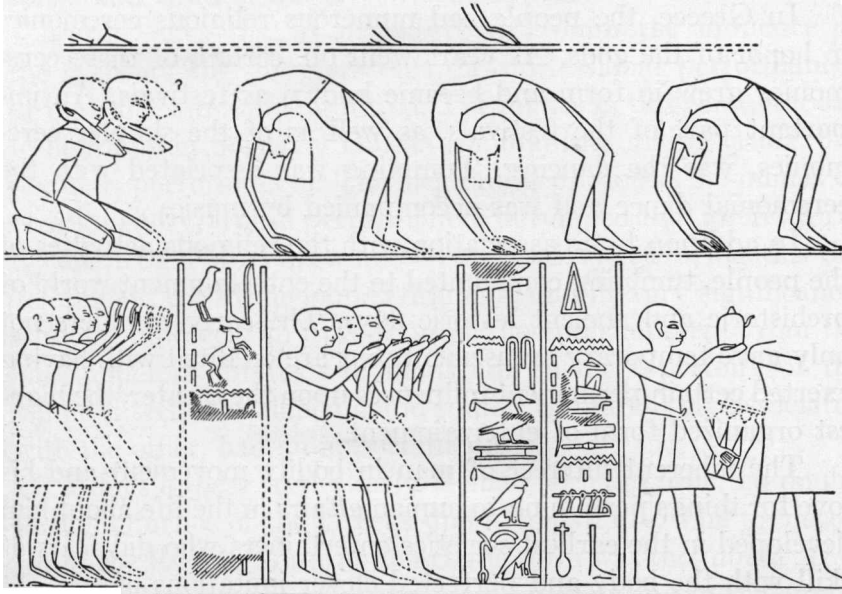
³ *Ibid.*, p. 62.

⁴ *Ibid.*, p. 70.

⁵ *Ibid.*, p. 66.

HISTORICAL SKETCH OF TUMBLING

"Three rows of performers go forth to meet the bark of Amon. In the middle one, three girls turn forward handsprings to the right, their hair falling over their faces as they lower their heads and fling their heels rapidly over them. Two others await their turn, kneeling with their hands thrown back as far as possible behind the ears. It looks like an attitude of mourning, but the fact that their long locks flow out over their heads shows that they are pre-



OowrteBIJof The MefJropotitan Museum of Art

Women Acrobats at a Religious Rite in Ancient Egypt
Scene on the Wall of the Temple of Deir el Bahri

paring for the sharp forward fling of the arms which is needed to set up the rotary movement of which the other three girls show the middle position, when the toes have touched the ground and the performer has only to bring herself erect with what is left of the impetus. The women have done their part. The men, strange to say, are much more restrained in their acts. Two bring libation vases. Four others who 'Clap their hands to a song in praise of Amon have the note appended, "The Choristers say, "Accept an offering, O Lord of the gods, and bless thy beloved son, King Horus Khamwese."', Four men, each with lifted fore foot, indicating that they are lightly treading a measure, are 'dancers of Amon.' "

N. de Garis Davies describes another representation of women tumblers in a religious procession that was found in the temple of Luxor. Twelve performers are accompanied by four women with sistrums and bearers of sacrificial offerings. Of the twelve, "six are so far through the forward somersault that hands and feet are both on the ground and six have almost returned to the vertical position from which they started." ¹

In Greece, the people had numerous religious ceremonies in honor of the gods. As years went on, certain of these ceremonies grew in form and became known as festivals. An important part of the festivals, as well as of the simpler ceremonies, was the dancing. Tumbling was associated with the ceremonial dance and was accompanied by music.

In addition to its association with the religious activities of the people, tumbling contributed to the entertainment world of prehistoric and ancient historic days. The early tumblers not only gave temporary amusement, but are credited with having exerted certain permanent influences upon the theater, the highest organized form of entertainment.

The inherent interest of man in bodily movement and his love for things pertaining to human affairs in the life about him developed in the earliest societies entertainers who did feats of skill with the body and perfected clever imitations of life. At the dawn of history, these entertainers already were traditional figures. Their entertainment materials had their beginnings in the religious ceremonies and folk ways of antiquity. Because of their close contact with the general populace, they became experts at knowing what appealed to the people and, thus, added to, and adjusted, their repertoire as time went on. They appear upon the first historical records skilled in tumbling and dancing, in juggling, in awesome tricks, such as sword swallowing and fire eating, or in comic mimicry. They are seen in this first historical glimpse as banded groups wandering from one locality to another, surrounded by spectators wherever they displayed their skills.

From this mixed group there evolved a class of entertainers

¹Davies, N. de Garis. *Op. cit.*, p. 68.

who were given the name of mimes in Grecian days. Their artistry was the imitation of life from a farcical approach. It is believed that the mimes joined the Komos, a procession in early Greek history made up of bands which went from one village to another as participants in a religious ceremony in honor of Dionysus. Out of this ancient procession with its bantering songs and tirades, the Greek comedy developed.

Nicoll¹ says that it probably is through the influence of the acrobats and jugglers that the professional performances of the mimes were inaugurated. The mimes in this character are to be found in the early Dorian communities giving crude, but popular, performances. This beginning produced the mimes of Greek history, 'whose performances developed into an art form by the fifth century B.C., known as the Mime. During this development, the Mime gained dramatic and literary significance, without, however, an uprooting of the entertainment from the basic inherent interests of mankind. In the repertoire of the mimic entertainer, dancing and tumbling, one closely associated with the other, had an important place.

Mimes appear in the early Roman societies, due, no doubt, to the influence of the Greeks upon Roman life. The predecessor of the Roman Mime as an artistic form was the *fabula Atellaniana*, the Roman comedy, supposedly originating in the city of Atella and brought to Rome about 200 B.C. These Atellan farces proved very popular up to the first century A.D. They were given both at theaters and at banquets. Their subject matter consisted of scenes of ordinary life and mythological burlesque. Gradually as an interlude between the change of scenery in the Atellan farces, mimes were introduced, including tumblers, jugglers, fire eaters, and others. This part of the performance became so popular that in time it took the place of the farces and became the whole performance, developing into the Roman mimic drama.

During the Roman period, the word *Saltator* (literally, dancer or acrobat), was used to denote a mimic actor. This

¹ Nicoll, Allardyce. *Masks, Mimes and Miracles*. London. George G. Harrap and Co., Limited, 1931, p. 35.

illustrates, again, the close connection between tumbling and dancing. According to Nicoll,¹ the "Roman mimes made as much use as their predecessors of the dance, and with the dance they unquestionably introduced a good deal of acrobatic movement."

As a summary of the description of the Roman stage, Nicoll² makes the following statement:

"The mimic drama, as a form of playhouse art, embraced nearly all within its scope. It was musical and terpsichorean as well as dramatic; it made free use of jugglers, acrobats, and wonder makers; this it did precisely because it was the mime, the art-form which took all life as its province."

The close connection of tumbling and dancing exerted an influence in the history of the dance as an art form in the theater. Dancing had a basic place in the early Greek theater. As time went on, however, it was relegated to an inferior position as the Greek tragedy and comedy took on an increasingly emphasized literary form. According to John Martin, dance critic of the New York *Times*, dancing would have disappeared in the theater after the fifth century B.C. if it had not been for the mimes. John Martin³ says, "Dancing was kept alive by the tumblers and jugglers fortunately in its real form with no didactic purposes. They have been important in the history of the dance."

The tumblers of early times had another important influence upon the theater. Women apparently engaged in tumbling from the beginning and exhibited their feats with the men. Nicoll claims that their participation had an influence upon the development of women mimes. This is significant in the history of the theater because women did not participate in the Greek tragedy or comedy. In fact, Nicoll⁴ says, "These 'acrobatic women' may be regarded as the far-off predecessors of the actress of today."

¹ Nicoll, Allardyce. *Op. cit.*, p. 83.

² *Ibid.*, p. 109.

³ Martin, John. In an unpublished lecture at Bennington School of the Dance, 1935.

⁴ Nicoll, Allardyce. *Op. cit.*, p. 36.

Tumbling, as part of the dance, was used as a means of entertainment, not only in the theaters of the ancient world, but, also, at private social occasions. **In** the tomb of Kenamun, in Egypt, women tumblers are shown amusing the guests at a feast.

In Greece, the tumblers, called the *kybisteters*, were sought for private entertainment at dinner parties or social occasions. **In** Homer's *Odyssey*,² Menelaus included two dancing tumblers as part of his entertainment at the nuptial fetes held in honor of the marriage of his daughter:

"Thus then in the high-roofed hall were feasting the neighbors
and kin
Of the glorious Menelaus, and were merry therewithin;
And to them a goodly minstrel was harping and singing the
lay;
And.e'en with his song's beginning two tumblers fell to play,
And amidst the feasting folk they whirled about as they played."

Callias entertained with a banquet at his house to celebrate a victory that a young friend of his had gained at the public games. Socrates and a number of his disciples were included among the guests. After the banquet they were entertained by a young woman, a *kybistetere*, who danced and tumbled. As a climax to her performance a large hoop was produced in the rim of which were inserted naked swords in such a way that the points were directed toward the center of the hoop. The adept young *kybistetere* proceeded to turn somersaults through this hoop to the thrill of all her audience, except wise and thoughtful Socrates. Said he: ³

"Now, turning somersaults in among knives seems to me to be a dangerous exhibition, which is utterly out of place at a banquet. . . . Nor is it any more diverting to watch the young and beautiful

¹ Davies, N. de Garis. *Op. cit.*, p. 61.

² Morris, W. *The Odyssey of Homer Done in English Verse*. London, Longmans, Green and Co., 1896. Book IV, p. 51. By permission of the Trustees of the late William Morris.

³ Xenophon, *Anabasis*, Books IV-VII, *Symposium and Apology*. Translated by Carleton L. Brownson and O. J. Todd. Loeb Classical Library edition, New York, G. P. Putnam's Sons, 1922. *The Banquet*, p. 457. By permission of Harvard University Press.

going through bodily contortions and imitating hoops than to contemplate them in repose ... but if the young people were to have a flute accompaniment and dance figures depicting the Graces, the Harpe, and the Nymphs, I believe that they would be far less wearied themselves and that the charms of the banquet would be greatly enhanced."

In Rome, the wealthy citizens gave elaborate banquets at their private estates, during which time entertainment was furnished by tumblers, actors, and musicians. Augustus had similar entertainments at his palace feasts.

The tumblers were active, also, in public entertainments of the ancient world. **In** Greece, the festivals held in honor of various deities attracted crowds of people. To these gatherings, came the entertainers who displayed their feats under circumstances similar to the side shows of today. Here were found the tumblers, men and women, who performed their feats to the amazement of the spectators, side by side with their associates, the jugglers and wonder men.

The Romans were a spectacle loving people. This desire was satisfied by over one hundred celebrations each year in the big city of 500,000 people. **In** addition, politicians, wishing to win the favor of the common people, soon learned not only to bribe them with wheat, but, also, to take advantage of this common trait by giving free shows.

In 55 B.C. Pompey built the first stone theater which he called the Circus Maximus. The word "circus," meaning circle, was derived from the circuit which was made by chariots as they raced around the arena.

Pompey, wishing to gain popularity with the people, announced a stupendous free show to be held for five days in the Circus Maximus. According to May¹ he promised that the slaughter of five hundred fierce Numidian lions and twenty ponderous pachyderms, (elephants), would be "interspersed with chariot racing plus equestrian and acrobatic feats of great daring "and dexterity." This magnificent spectacle was the be-

¹ May, E. C. The Circus From Rome to Ringling. New York, Duffield and Green, 1932, p. 1. By permission of Dodd, Mead and Company.

ginning of the circus which has survived throughout the ages to modern times. May ¹ further states that the politicians of Rome coming after Pompey, "in seeking new attractions for later circuses added rope dancing, classical posturing, and ground-and-lofty acrobatics." And thus, tumbling, offered as one of the thrills of the first circus, has held an unquestionable place in that realm for two thousand years.

Records, which have been left, depict some of the feats of the ancient tumblers. Activities which required the revolving of the body or supporting the body in an inverted position were popular. On the Egyptian tombs there were drawings of tumblers doing the handspring forward and backward, somersaults in the air and on the ground, and cartwheels. N. De Garis Davies ² speaks of a cartwheel "executed by two girls tightly linked together to make a four legged performer." The tumbler in a handstand position is to be seen in several instances as statues or as figures on Greek vases. The suppleness of the tumbler is shown in several Egyptian drawings by the back bend position.

The degree of skill of the ancient tumbler is attested by the spectacular feats which were used to thrill the audience. Women tumblers at Knossus are said to have turned somersaults between the horns of wild bulls. Turning somersaults over sharp pointed swords stuck in the ground, or, again, through hoops with sword points projecting through the rim toward the center were featured activities of the Greek tumblers. Maurice Emmanuel ³ gives special mention of a *kybidetere*, owned by the British Museum, who is represented as doing a handstand on the back of a crocodile.

Records indicated that the tumblers might have performed their activities in some instances to the accompaniment of instruments. J. de Garis Davies ⁴ mentions one scene in a tomb at the close of the Ramesside era, in which women tumblers

¹ May, E. C. *Op. cit.*, p. 4.

² Davies, N. de Garis. *Op. cit.*, p. 64.

³ Emmanuel, Maurice, *The Antique Greek Dance*. London, John Lane Co., 1916, Dodd, Mead and Co., New York, American publishers, p. 241.

⁴ Davies, N. de Garis. *Op. cit.*, p. 64.

are "performing under a palace window from which the women of the queen accompany them with music." In other representations of celebrations and processions, women with sistrums, instruments making a jingling sound when shaken, either precede or follow the tumblers.

TUMBLING IN THE MIDDLE AGES

When the Roman mimes were at their height, Christianity came into the world. The church frowned upon the mimes, their activities, and the influences of their merrymaking upon the people, whose thoughts should be upon the salvation of their souls, and attempted to banish them from the theaters, cities, and even the folds of Christianity, unless they gave up their profession. In spite of these drastic measures, the mimes remained popular with the people, with certain leaders, and even with some members of the clergy. At the beginning of the fourth century, Pope Eusebius warned his bishops "that they should eat moderately at table and have at their dinners no histriones (actors), buffoons, or acrobats."].

However, the pressure of disfavor of the Christian Church, in addition to the downfall of the Roman theater, caused many mimes, including tumblers, jugglers, animal leaders, and actors, to abandon Rome and become wanderers over the world, thus, beginning a wayfaring tradition which was of significance during the Middle Ages.

By the eighth century A.D. the mimes had penetrated into England. Strutt ² states that "the conversion of England opened the remote islands to Latin civilization in general; and it is not to be wondered at that the mimi, no less than the priests, flocked into the new fields of enterprise. Such a view is supported by the numerous miniatures of dancers and tumblers, jugglers, and bear-leaders of this period."

As this new era arrives, the word "tumble" comes into existence, teutonic in origin, with the original meaning "to dance

]. Nicoll, Allardyce, *Op. cit.*, P: 136.

² Strutt, Joseph. *Sports and Pastimes of the People of England*. London, printed for Thomas Tegg, 73 Cheapside, 1831, p. 33.

violently; to dance with posturing, balancing, contortions." ¹ The Anglo-Saxon adopted the word "tumbian" to mean to turn heels over head, to dance violently. The term "tumblester" was used to denote the feminine of tumbler. In time the Danish "tumle," Dutch "tomrnelen," and Swedish "tumla," Iceland's "tumbe," French "tomber," and Italian "tombolan," all came to include the idea of revolving, rolling, and contorting the body.

During this early period in England, the term "gleeman" was used to denote the wandering entertainer. Strutt states, "Generally speaking, I believe that vaulting, tumbling, and balancing were not executed by the chieftain of the gleeman's company, but by some of his confederates; and very often this part of the show was performed by females, who were called gleemaidens, *maSen-3lypienShy* the Saxons."

These wandering entertainers became very popular with the lords in feudal days, and in return for their activity received privileges at the courts and gifts such as money, horses, and robes. Chambers ² gives an excellent picture of this custom:

"The floor of the mediaeval court, thronged with minstrels of every degree, provided at least as various an entertainment as the Roman stage itself. The performances of the mimes, to the accompaniment of their despised tabor, or wry-necked fife, undoubtedly made up in versatility for what they lacked in decorum. There were the tombeors, tombestores, or tumbleres, acrobats and contortionists, who twisted themselves into incredible attitudes, leapt through hoops, turned somersaults, walked on their hands, balanced themselves in perilous positions. Female tumblers, tornatrices, took part in these feats. . . ."

Davis/ in his description of a typical feudal community in the thirteenth century, gives a similar picture of the skill of the tumblers:

¹ New English Dictionary On Historical Principles. Edited by Sir James Murray and others. Oxford at the Clarendon Press. Vol. X, p. 458.

² Strutt, Joseph. *Op. cit.*, p. 207.

³ Chambers, E. K. *The Mediaeval Stage*. Oxford, Clarendon Press, MCMIII, Vol. I, p. 70. By permission of Publishers.

⁴ Davis, W. S. *Life on a Mediaeval Barony*. New York, Harper and Brothers, 1923, p. 135.

"Other jongleurs have appeared ..• who could themselves dance through hoops ... or prove themselves genuine contortionists, as is declared in the old Latin poem:

He folds himself,
He unfolds himself,
And in unfolding himself,
He folds himself."

Strutt ¹ states:

"The Saxon princes encouraged the dancers and tumblers; and the courts of the Norman Monarchs were crowded with them: we •have, indeed, but few of their exertions particularised, for the monks, through whose medium the histories of the Middle Ages have generally been conveyed to us, were their professed enemies: it is certain, however, notwithstanding the censure promulgated in their disfavor that they stood their ground, and were not only well received, but even retained, in the houses of ~he opulent."

Chambers ² shows the heterogeneous variety of these performers:

"There were the rhapsodes who sung the tragic cantica, born from their context, upon the stage. There were musicians and dancers of every order and from every land. There were jugglers (praestigiatores, acetabuli), rope walkers (funambuli), stilt walkers (grallatores), tumblers (cernui, petauristae, petaminarii), buffoons (sanniones, scurrae), beast tamers, and strong men. The pick of them did their 'turns' at the theaters and the amphitheatre; the more humble were content with modest audiences on street corners or in the vestibule of the circus."

In the eleventh century towns arose throughout western Europe. Where formerly the feudal lords had beckoned the tumblers at court, now the towns engaged their mimes and minstrels. As these performers perfected their spectacular feats, or discovered new ones, they often gave them the name of the town to which they belonged, such as the vault of Metz

¹ Strutt, J. *Op. cit.*, p. 210.

² Chambers, E. K. *Op. cit.*, Vol. Y, p. 7.

and the Antwerp Wheel. Rivalry between towns grew in regard to the ability of their tumblers to excel in daring and original activities.

In order to protect themselves from wandering mimes, the mimes attached to the towns began to form guilds. This was in accordance with the trend of the time for trades, crafts, and professions to become organized. In 1321, the entertainers formed a Guild in Paris, "a l'acort, du common des minestreus et minestrelles, jongleurs et jongleresses," which existed until 1776.

The term for the entertainer in general at this time was "ioculator," of latin origin. This became "jongleur" in French, and "jogeler" in English. Later the latin terms, "ministelles" and "ministrallus" were used, also, to indicate entertainers. In both of these groups, namely, the jongleurs and the ministrallus, the tumblers had a part. It is interesting to note that both men and women belonged to the guild.

The members of this guild lived together on a street in Paris, called the Rue des Jongleurs. In addition to their bond of interest in their profession; they seemed to have been united in spirit in other matters of life. One instance of this is of special interest since it shows the progress that the tumblers had made in their status in religious circles. In contrast to the experience of the Roman mimes who had been forbid admittance into the church, two jugglers at this period, by the name of Jacques Goure and Huet le Lorrain, were the promoters of the founding of the church and hospital of St. Julian in Rue St. Martin. The members of the guild subscribed to the project and on the last Sunday in September, 1335, the Chapel was consecrated. As people entered the building for the occasion they beheld on the front of it three figures, one representing a troubadour, one a minstrel, and one a juggler."

According to Lacroix, the brotherhood was divided by the end of the fourteenth century into the jugglers proper, and

¹ Chambers, E. K. The Mediaeval Stage. Oxford, Clarendon Press, MCMIII, Vol. 11, p. 258. By permission of Publishers.

² Lacroix, Paul. Manners, Customs and Dress During the Middle Ages and During the Renaissance Period. London, Chapman and Hall, 193 Piccadilly. 1874, p. 224.

the tumblers. The jugglers recited poetry, sang songs, and played musical instruments, while the tumblers performed feats of bodily skill or exhibited trained animals.

The eleventh, twelfth, and thirteenth centuries have been designated as the "palmy days of minstrels," and so they were of tumblers. These performers had an eager audience wherever they went, and their feats of skill were familiar to all sorts of people. It was natural, therefore, to find that the tumblers and their activities were reflected in the literature and the art of the day.

The experiences of a tumbler were taken as a theme of an old mediaeval story, entitled, "Our Lady's Tumbler,"¹ and written by an unknown author. The story, accepted as one of the masterpieces of the "Mediaeval period goes that the tumbler "erred up and down, to and fro, so often and in so many places, that he took the whole world in despite, and sought rest in a certain Holy Order." After joining the Order he became very ashamed that he "had neither part nor lot in the business of the monastery, since he could do nothing either in labor or in prayer." As he was lamenting this fact one day he wandered about the abbey and finally found himself within the crypt above the altar of which was the statue of St. Mary. All at once the bells for Mass rang, and, in his dismay at being there with no offering, he suddenly resolved, "I will do that which I can, and honor with my craft, the Mother of God in her monastery. Since others honor her with chant, then I will serve with tumbling."

Looking up at the image he said, "Lady, to your fair charge I give my body and my soul. Sweet Queen, Sweet Lady, scorn not the thing I know, for with the help of God I will essay to serve you in good faith, even as I may. I cannot read your Hours nor chant your praise, but at the least I can set before you what art I have. . . .

"Then commenced he his merry play, leaping low and small,

¹ Our Lady's Tumbler. Translated by Eugene Mason. Everyman's Library. Volume Aucassin and Nicolette and Other Mediaeval Romances and Legends. New York, E. P. Dutton & Co.

tall and high, over and under. Then once more he knelt upon his knees before the statue, and meekly bowed his head. 'Ha!' said he, 'Most gracious Queen, of your pity and your charity scorn not this my service.' Again, he leaped and played, and for holiday and festival made the somersault of Metz. Again, he bowed before the Image, did reverence, and paid it all the honor that he might. Afterwards he did the French vault, then the vault of Champagne, then the Spanish vault, then the vaults they love in Brittany, then the vault of Lorraine, and all these feats he did as best he was able. Afterwards he did the Roman vault, and then with hands before his brow, danced daintily before the altar, gazing with a humble heart at the statue of God's Mother ... Then he walked on his two hands, with his feet in the air, and his head near the ground . . . Then he turned him about, and leaped once again. 'Lady,' said he, 'As God is my Saviour, never have I turned this somersault before. Never has tumbler done such a feat, and certes, it is not bad.' "

The tumbler continued to do his unique services day after day before the image. The narrator states, "Now think you that the Lord would have accepted this service, had it not been done for love of Him? . . . God asks not gold, neither for silver, but only for love unfeigned in His people's hearts, and since the tumbler loved Him beyond measure, for this reason God was willing to accept his service."

Another instance of the use of tumbling in literature during the Mediaeval times is in the writings on a biblical subject. Since the early days of Christianity it became a traditional custom to interpret the dance of Salome, daughter of Herodias, which she did in the presence of Herod before requesting of him the head of John the Baptist, in terms of tumbling feats. This interpretation was written in the early manuscripts describing the scene. In a translation ¹ in the seventh century in the Cotton Library, it read, "She plre3eSe,,3ehcaSeDenoie;" she jumped, or leaped, and pleased Herod. In another Saxon version of the eleventh century in the Royal Library, she

¹ Strutt, Joseph. *Op. cit.*, p. 20S.

"tumberee, , hie hcoje Denoie;" she tumbled and it pleased Herod. A third reads that Herodias' daughter "tumboSe psejie," tumbled there, etc. The association of tumbling with Salome's dancing became so traditional that by 1382, when the Wycliffe Bible was completed, the word "tumblide" was given in the margin as a variant of "daunsede" in Matthew XIV, 6, in which this scene is depicted. The passage read, "Da on herodes zebyrd-daeze tumbude paere herodiadiscean dohtur beforan him." Again, Mark VI, verse 22, stated, "pa ba paere Herodiadescan dohtur inneode 0 tumbode."

The famous dance of Salome became the subject Of mediaeval artists, and it was represented by them, as by the writers, in terms of tumbling activities. The representations took the form of old prints some of which are found in the British Museum, of mediaeval, stained glass in Cathedrals, and of sculpture. Jusserand ~described three such representations:

"At the Clermont-Ferrand, in the stained glass of the cathedral (thirteenth century), Salome dances on knives which she holds in each hand, she also having her head downwards. In a window at the Lincoln Cathedral she has no knives, but her 'dance' is of the same sort and her red-stockinged feet touch the upper line of the glass panel. At Verona, she is represented in the most ancient of the bronze gates of St. Zeno (ninth century), bending backwards and touching her feet with her head. Those standing by are filled with surprise and admiration, one puts his hand to his mouth, the other to his cheek, in an involuntary gesture of amazement."

Various reasons have been offered for the interpretation of the dance of Salome in terms of tumbling activity. Some have suggested that ancient writers attempted to convey the idea that the dancing of Salome must have been of an unusual and extraordinary character to have influenced Herod to grant a request of such serious nature. Therefore, they depicted Salome as doing difficult and amazing feats in tumbling, an activity

1 Jusserand, J. A. *English Wayfaring Life in the Middle Ages*. London, T. Fisher Unwin, Ltd., Adelphi Terrace, 1925, p. 219. By permission of Ernest Benn, Limited, Publishers,

which was associated with dancing and which was very familiar to them.

Another possible reason was the fact that the monks were the earliest of the mediaeval writers and translators. They held tumblers in contempt, and, therefore, in describing this regrettable event in Christian history, they pictured Salome in her



SALOME TUMBLING BEFORE HEROD

From *Sports and Pastimes of the People of England* by Joseph Strutt

dancing as performing despised tumbling activities as a means of attracting Herod.

TUMBLING FROM THE FIFTEENTH TO EIGHTEENTH CENTURIES

As the mediaeval ages draw to a close, history records that tumbling was a favorite spectacle of the royalty. Instances are shown that kings not only had their favorite tumblers but paid them generous sums for their feats of skill. Strutt states:

"We read, for instance, of a tumbler in the reign of Edward **II**, who rode before his majesty and frequently fell from his horse in such a manner that the king was highly diverted, and laughed exceedingly, and rewarded the performer with a sum of 20 shillings, which at that period was a very considerable donation. A like reward of 20 shillings was given by order of Henry **VIII**, to a strange tumbler, that is, I suppose, an itinerant who had no particular establishment; a like sum to a tumbler who performed before him at Lord Bath's; and a similar reward to the 'tabourer' and a

¹Strutt, Joseph. *Op. cit.*, P: 210.

tumbler', probably of the household. It should seem that these artists were really famous mirthmakers; for one of them had the address to excite the merriment of that solemn bigot, queen Mary. 'After her majesty,' observes Strype, 'had reviewed the royal pensioners in Greenwich Park, there came a tumbler and played many pretty feats, the queen and Cardinal Pole looking on; whereat she was observed to laugh heartily.' "

Queen Elizabeth was an ardent admirer of tumbling as an amusement. Records show that she was entertained by troupes of tumblers, among whom was an Italian group, including women as well as men. At that time "Chamber Accounts for 1577-78 include an item for a mattres, hoopess, and boardess with tressells for the Italian Tumblers." ¹

It is a well known fact that Queen Elizabeth loved to take journeys throughout her kingdom, at certain points of which elaborate entertainments were given. Nicoll reports that the Italian company "accompanied Elizabeth on her progress in Windsor and Reading. . . . Probably they played publicly in London." ²

At this time it seemed that the ministers looked upon the tumbling of Italian women with disfavor because Chambers ³ records that the preacher, Thomas Norton, attacked the "unchaste, shamelesse and unnaturall tomblinge of the Italian Weomen."

Later Queen Elizabeth had her own company of tumblers who became the "most famous of all the London companies during the decade of the eighties" (1580's).⁴ Records of the dates of the performances of the Queen's Tumblers show that they were scheduled at Bath in 1589, at Court on December 26, 1589, March 1, 1590, and included Coventry, Ludlow, Nottingham, Bridgworth and Faversham during 1589-1590.

The feats of tumblers during this time were such as to give the average person not only amusement, but also a feeling of

¹ Chambers, E. K. *The Elizabethan Stage*. Oxford, At the Clarendon Press, MCMXXIII. Vol. II, p. 262.

² Nicoll, Allardyce. *Op. cit.*, p. 304.

³ Chambers, E. K. *Op. cit.*, Vol. II, p. 262.

⁴ Chambers, E. K. *Op. cit.*, p. 104.

awe concerning the wonders of bodily movement displayed. This fact aptly is illustrated in the following letter, written in 1575 to a friend, Mafter Humprey Martin, by Robert Laneham/ after he had witnessed the tumbling of an Italian before Queen Elizabeth. The letter is unique from the viewpoint both of the descriptive terms he used to relate the performance, and also, of his account of convincing himself that a man and not a spirit had performed, though he was sure that the nature of the tumbler's back was different from that of ordinary man.

In the letter Robert Laneham, who was an officer attendant in court, tells his friend, a merchant of London, of being at court at Killyngworth Castl, "a territory of the right honorable, My fingular good Lord, My Lord the Earl of Leycester: of whooz incomparabl cheerying and enterteynment thear, untoo her Majefty noow, I will fhew yoo a part heir that coold not fee all; nor had I feen all, coold well report the hallf."

"Noow within alfo, in the meantime waz thear fheawed before her hignes, by an Italian, fuch feats of Agilitee, in goinges, turninges, tumblings, caftinges, hops, jumps, leaps, fkipis, fprings, gambaud, foomerfauts, caprettiez, and flights; forward, backward, fydwize, a doownward, upward and with fundry windings, gyrings, & circumflexions; Allro lightly and with fuch eazinefs, as by mee in feaw words it is not expreffibl by pen or fpeech I tell yoo plain. I bleaft me by my faith to behold him, and began to doout whither a waz a man or a fpirite, and I ween had doouted mee 'till this day, had it not been that anon I bethought me of men that can reaon and talk with too toongs, and with too parfons at onez, fing like Burdz, curteiz of behavior, of body ftrong, and in joynts fo nymbl withall, that their bonez feem as lythie and plyaunt fyneuz. They dwel in a happy Iland (az the Book termz it,) four moonths fayling Southward beyond Ethiop. Nay Mafter Martin I tell you no jeft, for both Diodorus Siculus an

¹Laneham, Robert. A Letter Wherin Part of the Entertainment Untoo the Queenz Majesty at Killingsworth Castle in Warwick Sheer in this Snmmerz Progreft, 1575 is Signified. Warwick, 1784, p. 26.

Auncient Greek Hiftoriographer in his third book of the Acts of the olld Egypcians; and alfo from his Conrad Gefnerus, a great learned man and a very diligent Writer in all good Arguments of oour time, but deceafed, in the first chapter of hiz Mithridates reporteth the fame. As for this fellow I cannot tell what too make of him, fave that I may *geNe* his bak metalld like a Lamprey, that has no bone, but a lyne like to a Lute Ctring. Well fyr, let him pars and his feats, and this dayz paf'time withall, for heer is. as mooch as I can remember me for Thurfdaiz entertainment."

The court of France also received tumblers well. Depping ¹ speaks of an Italian by the name of Zuccaro, "the perfect type of those Italians, adroit) supple, thoroughly disciplined in all bodily exercises who came to France in the sixteenth century when the arts and games of Italy began to be introduced at the French court. . . . He was indeed the servant of a princess but a German one, Elizabeth, daughter of Emperor Maximilian, married to the king of France, Charles IX."

It seems that Zuccaro wrote a book on his art, and within it he thanks heaven that he "had found the means of reducing the somersault under certain rules and measures which had never been accomplished before." ² He also thanked heaven that he had dedicated his book in which he set forth his principles "to her very Christian Majesty of France."

The king, Charles IX, grew interested in performing feats of tumbling and became a pupil of Zuccaro, who states, "This magnanimous king, who will never be sufficiently praised, was desirous of practicing perilous leaping, in respect of which I have the honor to be of use to his Majesty." ³

The fact that Italy gave tumblers to the world during the middle ages is explained from two angles, the Roman mime and the *Commedia dell' arte*, Nicoll ⁴ says, "In view of the aero-

¹ Depping, Guillaume. *Wonders of Bodily Strength and Skill in All Ages and All Countries*. Translated and enlarged from the French by Charles Russell. New York, Scribner, Armstrong and Co., 1873, p. 155. By permission of Charles Scribner's Sons.

² *Ibid.*, p. 156.

³ *Ibid.*, p. 156.

⁴ Nicoll, Allardyce. *Op. cit.*, p. 166.

batic leaven of the Roman mime, and in view of the similar element in the *Commedia dell' arte*, this tumbling, dancing, juggling tradition, which extends throughout the whole course of the middle ages is not without its significance."

The *Commedia dell' arte*, or Comedy of Art, coming into existence in Italy late in the fifteenth century, had its origin in the popular farcical Roman *Atellana*. Harzberg ¹ states that "it is generally thought to have evolved from the strolling bands of clowns, acrobats, jugglers, and musicians. Whatever its actual inception, the Comedy of Art was a descendant of the Roman *Atellana*."

One characteristic of the *Commedia dell' arte* was the fact that regardless of the nature of the plot the roles kept the same character. One of the most famous and popular personalities was Harlequin. Harlequin was a clownish sort of character. Ducharte ² quotes Riccoboni as writing that "the acting of the Harlequins before the seventeenth century was nothing but a continual play of extravagant tricks, violent movements, and outrageous rogueries. I-Ie was at once insolent, mocking, clownish, and emphatically ribald. I believe that he was extraordinary agile, and he seemed to be constantly in the air; and I might confidently add that he was a proficient tumbler."

Again, Ducharte ³ states that Harlequin "must excell in impromptu, and the first thing that the public always asks of a new Harlequin is that he be agile, and that he jump well, dance, and turn somersaults." In describing the Harlequin of the eighteenth century he states: ⁴

"He is the unwitting and unrecognized creator of a new form of poetry, essentially muscular, accented by gestures, punctuated by somersaults, enriched with philosophic reflexions and incongruous noises. Indeed, Harlequin was the first poet of acrobatics and unseemly noises."

At this point in history, there was evidence of a growing

¹ Harzberg, Hiler, and Moss. *Slapstick and Dumbbell*. Paris, Lecram Press, 1924.

² Ducharte, Pierre. *The Italian Comedy*. Translated by R. T. Weaver. New York, The John Day Co., 1929, p. 125.

³ *Ibid.*, p. 133.

⁴ *Ibid.*, p. 134.

leniency on the part of the thoughtful in regard to the tendency of the people to love and indulge in favorite pastimes. Robert Burton,¹ Vicar of St. Thomas, Oxford, made the following statements in his *Anatomy of Melancholy*, which was published in 1621:

"Dancing, singing, masking, mumming, stage plays, howsoever they be heavily censured by some severe Catos, yet if opportunely and soberly used, may justly be approved Those May games, wakes, and Whitsum ales, etc., if they be not at unseasonable hours, may justly be permitted. Let them, (the people), freely feast, sing and dance, have their puppet-plays, hobby-horses, tabors, crowds, (violins), bagpipes, etc., play at ball and barley-breakes, and what sports and recreations they' like best Plays, masks, jesters, gladiators, tumblers, jugglers, etc., and all that crew is admitted and winked at: ... that they might be busied ... that would otherwise more perniciously be idle."

It became the custom of the royalty to give entertainments at court which were open to the general populace. Lacroix² characterized the people of the Middle Ages as having an unsatiable love of sightseeing, coming great distances from all parts to witness any amusing exhibition. He further states that "the populace were always most enthusiastic spectators of military displays, of court ceremonies, and, above all, of the various amusements which royalty provided for them at great cost in those days: and it was on these state occasions that jugglers, tumblers, and minstrels displayed their talents."³

In addition to, and far different from, the court spectacles, the populace had their desire for sightseeing and amusement satisfied in another realm, that of the mediaeval Fairs. The growth of the mediaeval agricultural and trade Fairs in the latter part of the sixteenth century was a nucleus for the assemblage of tumblers, jugglers, and animal tamers for the entertainment of the people. The fairs became very popular.

¹ Burton, Robert. *The Anatomy of Melancholy*. London, Chatto and Windus, MCMXXIV, p. 346.

² Lacroix, Paul. *Op. cit.*, p. 221.

³ *tua*; p. 222.

Depping ¹ states:

"The rendezvous of all professional leapers in France was the fair at St. Germain, the center of trade and pleasure, where during two months and a half-the duration of the fair in the seventeenth and eighteenth centuries-the Parisians congregated in great multitudes.... It was here that the great athletic celebrities formed their style, and from this nursery went forth the acrobats who made such a prominent figure at the fete given to Louis XV by the Duke of Bourbon in his magnificent domain of Chantilly, from 'the fourth to the eighth of November, 17~~."

Jusserand ² emphasizes the popularity of the entertainers at the Goose Fair at Nottingham, "who came not to cure, but to amuse, and who, if they did not offer remedies for diseases at least brought forgetfulness of troubles: the minstrels, tumblers, jugglers, and singers."

A picture of the entertainment of the Mediaeval Fairs is given by Gay ³ in his fable of the two monkeys when he describes Southwark Fair:

The tumbler whirls the flip flap round,
With somersets he shakes the ground;
The cord beneath the dancer springs;
Aloft in air the vaulter swings,
Distorted now, now prone depends,
Now through his twisted arms ascends;
The crowd in wonder and delight,
With clapping hands applaud the sight.

The origin of the word "someset," or "somersault," has been a question of dispute in earlier writings. Depping ⁴ states:

"It is said that this word dates from the 17th century from the reign of James I"whose great favorite was Robert Carr, Duke of Somerset,who was highly accomplished in this exercise. But somerset is a corruption of Somersault, which itself is an altered form of

¹ Depping, Guillaume. *Op. cit.*, p. 159.

² Jusserand, J. A. *Op. cit.*, p. 194.

³ Underhill, John. Poems of John Gay. New York, E. P. Dutton Co" Vol. II. Fable XL. The Two Monkeys, p. 117.

⁴ Depping, Guillaume. *Op. cit.*, p. 160.

the word *soubresault*, in its turn derived from the Italian *soprasalto*. In reality, the origin of this species of leaping in England was of a much more ancient date. Jugglers performed this feat in order to amuse Saxon princes and the Norman Kings; ... "

The word "fly-flap" is used, also, and defined, by Strutt ¹ as "the feat of turning round with great rapidity, alternately bearing upon the hands and the feet."

A glimpse of other types of activities which the tumblers performed is gained in the following passage: "They threw wonderful somersaults, they leaped through hoops placed at certain distances from one another . . . they walked on their hands with their feet in the air or with their heads turned downwards so as to look through their legs backwards." ² Strutt ³



A TUMBLING FEAT IN THE XIV CENTURY

From *Sports and Pastimes of the People of England* by Joseph Strutt

mentions that leaping through barrels without heads and through hoops was a common performance.

As in ancient days, tumbling often was accompanied by music, but by the Middle Ages the type of instruments were quite different from those used in ancient Egypt and Greece. The common instruments became the drum and the fife.

Out of this realm of historical tumbling activity, an ordered program was becoming crystallized. Le Roux ⁴ states:

"Before the acrobat attempts the Somersault forward he must

¹ Strutt, Joseph. *Op. cit.*, p. 229.

² Lacroix, Paul. *Op. cit.*, p. 224.

³ Strutt, Joseph. *Op. cit.*, P- 229.

⁴ Le Roux, H., and Garnier, J. *Acrobats and Mountebanks*. Translated from the French by A. P. Morton. London, Chapman and Hall, Ltd., 1890, p. 244.

go through the whole series of exercises in posturing. First, bending forward or posturing the hands laid flat upon the ground to support the body, which is raised with legs opened the first time in the form of Y, the second time in elongation of 1. Then comes bending backward in which the body is arched in an inverse sense, the hands on the ground near the heels.

"Then follows the curvet, which is performed by throwing the body suddenly backward until the hands touch the ground and at the moment they reach the floor a vigorous relaxation of the muscles of the legs makes the acrobat rebound to his feet.. : .



TUMBLING WITH MUSICAL ACCOMPANIMENT IN THE XIV CENTURY

From *Sports and Pastimes of the People of England* by Joseph Strutt

"The classical performance of a carpet acrobat opens by bending backward. It is continued by a monkey's somersault, a decomposition of the somersault backward, by the rondade--a curvet backward and then by a somersault.

"But vaulters do not end here; each of them varies in an infinite number of ways by the acts of his invention, the outline of his acrobatic career.

"He introduces an Arab somersault (a somersault from the side, which is obtained by starting from the ground on one foot only), the lion's somersault-which is a monkey's somersault forward; the coward's leap, in which the acrobat lying upon his back raises himself by one effort of the loins, the forward somersault, a lion's somersault without the hands which throws the man's legs in air, head downward upon the nape of the neck; the carp's leap, also the sudden spring of an extended acrobat, which raises him to his feet through the relaxation of the muscles of the spine."

The field for tumblers was not limited to the court and fairs. They performed, also, at theaters and were well received

in that realm in England, as is indicated by a statement published in the *Tatler* ¹ of January 3, 1709. "I went on Friday last to the opera; and was surprised to find a thin house at so noble an entertainment till I heard that the tumbler was not to make his appearance that night."

In 1770, Sergeant-Major Philip Astley opened his British Riding School entertainment. In front of the building was a pictorial bill announcing:

"La Force d'Hercule or The Egyptian Pyramid
An Amusing Performance of Men Piled
On Men."

The picture showed a performer standing on the shoulders of two men, who, in turn, were standing on the shoulders of others. May ² states that the Pyramid was the predecessor to the "brother acts" in the circus.

During the season of Astley's entertainment, "no sooner had the Englishman's acrobatic Egyptian Pyramid palled upon a fickle public than he featured one James Lawrence who, garbed as a Great Devil a La Mephistopheles, threw a somersault over twelve horses. This act, advertised as 'Le Grand Sault du 'Trampoline,' was the forerunner by a century of American circuses' double somersaulting leaps over horses, camels, and elephants." ³

TUMBLING IN AMERICA

As colonization began in America it was not long before wandering entertainers, tumblers, jugglers, animal tamers, and rope dancers, crossed the Atlantic to the new country, and, in spite of hostility of religious orders, found a place in the hearts of the people who, though laden now with toil and hardships of pioneering, had been familiar with such entertainments as part of the life of their mother countries.

¹ *Tatler*, No. 115, Jan. 3, 1709.

² May, E. *Op. cit.*, p., 7.

³ *Ibid.*, p. 10.

As the pioneers pushed their settlements westward in the newly cleared country, the entertainers traveled to the outlying districts in wagons. May ¹ states that "nearly all of these precursors of what we later called wagon shows or mud shows were patterned on the European fair and market troupes of jugglers, rope-dancers, tumblers, and animal tamers, whose ancestors appeared in the Circus Maximus and Coliseum."

Then came the Revolutionary War, accompanied by a lull in entertainments, due to an act of Congress in 1774 which prohibited "all exhibitions of shews, plays, and other expensive diversions and entertainments." ² After the war entertainments began to flourish again, among which was a circus owned by John Bill Ricketts, an Englishman. One evening in 1793 the performance in Philadelphia was honored by the presence of George Washington. As a special feature for the distinguished guest, Ricketts "leaped from one horse through a hoop, suspended in the air twelve feet, after which he recovered 'his situation,' the horse being at full speed." ³

"Mr. Alex Placide," who had been with Astley and had gone by the name of 'The Great Devil' as a tumbler, entertained a New York audience during 1792. During the existence of his second Philadelphia circus, even Ricketts had followed the example of almost every early American circus manager by introducing Astley's 'Egyptian Pyramids' to the accompaniment 'of a jingle similar to that first used by Astley:

"Men piled on Men
Who with active leaps arise
Building the breathing Fabric to the Skies.
A Little Boyan the topmost Row
Points the tall Pyramid and crowns the Show."

As time went on, some Americans were not satisfied to be mere spectators of circus performances, but were lured to leave their various trades and become themselves showmen or owners

¹ May, E. C, *Gp. cit.*, p. 27.

² *Ibid.*, p. 87.

³ *Ibid.*, p. 19.

⁴ *Ibid.*, p. 21.

of shows. In the face of competition from French, Spanish, and Italian circus performers, who were performing in America by 1812, and in face of opposition from ministers, Yankee showmen took to the road and became pioneers of the American circus performers, who were destined to develop the modern American circus to the highest plane in circus history.

Tumbling was used often as a means of advanced advertisement of the circus in the villages. May ¹ states that as the circus "approached its stand, a clown rode onto the village green, tooted on a trumpet if he was gifted, and announced a performance 'by the entire company!' To add to his ballyhoo he did a bit of tumbling."

By the time of the Civil War, tumblers were traveling with circuses not only by the way of wagons, but also, circus boats, which steamed down the rivers to the southern villages. When hostilities began, some of the Yankee performers, though in a most precarious position, continued to show their skill before audiences. May describes the experience of Pete Conklin, a clown in the Mabie Circus, who was captured one night by a Kentucky Colonel as he was returning to the circus boat from the lot where a few hours before the troupe had entertained Morgan's Guerrillas. Conklin attempted to win his release by claiming that he had clowned for the men, just a short time before.

The Colonel said, "If yer the old clown just give us a somerset. Clowns is always the best show tumblers." So Conklin, though he had on hip high boots and a heavy overcoat, at the impetus of the Colonel's big six shooter, "promptly turned a very high back. Whereupon he went to his boat with a guard of honor." ²

The circus was not the only field in America for tumblers. As in earlier times, the theater received them. The history of the American theater, especially in the field of the Variety show, or Vaudeville, discloses the fact that tumblers filled a place on the program which has remained popular to modern times. In

¹ May, E. C. *Op. cit.* p. 29.

² *Ibid.*, p. 83.

a discussion of this type of theater, Matthews ¹ states that it "extends its hospitality to the acrobat, single or in groups, throwing flip flaps on the stage."

Another historical field for tumbling found its way into America, that of dancing. The traditional connection of tumbling with dancing since ancient times had been kept alive in America through acrobatic dancing, taught by professional dancing masters.

The circus tumbler not only brought amusement and thrills to thousands of people in America, but also exerted an influence of professional significance by indirectly becoming responsible for the introduction of tumbling as a physical activity in educational institutions. By the latter third of the nineteenth century, it became customary for members of tumbling and acrobatic troupes, while wintering, to practice in the gymnasia of the Y. M. C. A. and other organizations. Here amateurs came in contact with them and, in many instances, received training from them. At about this same time, there was an increased interest in physical training, which resulted in the building of gymnasia in colleges and other institutions and the preparation of physical training teachers. In a number of instances those who had become skilled in tumbling were attracted to the new field of physical training, took a professional course, and became teachers of physical training. Into the Y. M. C. A. and educational institutions of higher learning went these new teachers and with them entered the art of the circus tumbler. In these new surroundings the entertainment values of tumbling were placed secondary to the contributions it had to offer the participant as a physical activity.

Outstanding in the group of early teachers of tumbling was William Gilbert Anderson. On a summer afternoon in 1875, when just a lad, he became inspired to learn to tumble when his friend, Johnny Ahearn, who was standing on a little mound, suddenly "leaped into the air, 'balled up', and did a back somersault." ² Johnny became the youthful teacher, the barn with its

¹ Matthews, Brander. *A Book About the Theater*. New York, Charles Scribner's Sons, 1916, p. 241.

² A letter by Dr. Anderson to the authors.

haymow was the place of instruction, and the neighborhood boys were the assistants whose duty it was to grasp the trouser belt of the would-be tumbler during the learning process. This was the first training of a skillful tumbler who was destined to become one of the early teachers of tumbling and a leader in the physical education profession.

By winter the young acrobat was advanced far enough to take work with an acrobatic troupe of a circus which wintered in Quincy. He learned to do the two-high act and the leaping front the camel back spring board. In 1886 and 1887 he joined the old Boston Y. M. C. A. gymnasium at Tremont and Elliott Streets, which was directed by Robert J. Roberts. Here he came in contact with more tumbling professionals and amateurs and, as a result, developed such skill in ground and lofty tumbling that he was offered a job in the P. T. Barnum Circus.

Circumstances, however, prevented the acceptance of the circus offer, but he did appear in the annual Y. M. C. A. exhibitions in the Boston Music Hall, which were witnessed by many prominent Boston citizens. In 1881 Dr. Anderson began his teaching career in tumbling in the Y. M. C. A. at Cleveland. From 1883 to 1890 he was in charge of the physical training at the Adelphi Academy in Brooklyn where he developed a number of good tumblers. In 1886 he was called to Yale as a visiting teacher to coach athletic teams and began tumbling work with the Yale men. This same year he organized the School of Physical Education at Chautauqua and for nearly twenty years taught tumbling to the young men of the summer school.

In 1892 Dr. Anderson became director of the Yale Gymnasium, a position which he held for forty years. There he found tumbling to be one of the most popular forms of exercise.

During his long career, Dr. Anderson, now Director Emeritus of the Yale Gymnasium, has made many contributions to physical education. Outstanding among these is his influence upon tumbling as a physical education activity, due to his personal skill as a tumbler and his successful teaching experience.

Other prominent physical educators who were proficient in tumbling and became early teachers of it were: Dr. Dudley A. Sargent of Harvard, Dr. J. E. Raycroft of Princeton, W. F. Davidson of Syracuse, Dr. William Burdick of Baltimore, Dr. R. Tait McKenzie of Pennsylvania University, George Goldie of Princeton, James Douglas Andrews of the Brooklyn Y. M. C. A., Dr. Harry Pettit of Brooklyn, and J. Myron Waldorph of the New Brunswick Y. M. C. A.

In 1886 a youth, James T. Gwathmey, had an experience which the average boy receives only through vicarious means. He was taught to tumble by a real circus tumbler. In the Norfolk, Virginia, Athletic Club, Dave Castello, equestrian director of Barnum and Bailey Circus and the leading tumbler of that show for a number of years, taught James tumbling feats. Today, Dr. Gwathmey in speaking of his teacher says: "His real name was Dave Loughlin. In his day he was one of the best tumblers in the world and taught me just for the fun of the thing." ¹

This thrilling experience is significant in the history of tumbling because it, plus a professional training and teaching experience, resulted in the writing of the first tumbling book in America in 1897. To his splendid technical training in tumbling, Dr. Gwathmey added a professional teacher training, enrolling as one of the first students in the Young Men's Christian Association Training School at Springfield, Massachusetts. He taught tumbling upon becoming physical director of the Y. M. C. A. in Des Moines, Iowa, and Omaha, Nebraska. In 1890-1898 he became physical director of Vanderbilt University and the Nashville Athletic Club, and conducted tumbling classes in both institutions. He was principal of the Vanderbilt University Summer School for Higher Physical Culture. According to Dr. Gwathmey, " 'the Higher Physical Culture' consisted of ground and loft tumbling systematically taught and, also, advanced horizontal and parallel bar, and horse work." ² An ordinary tumbling mat was used for the

¹ A letter by Dr. Gwathmey to the authors.

² *Ibid.*

ground work and a large mat, 6 feet wide, 15 feet long, and 2 feet deep, stuffed with straw, was used for spring board work. Exhibitions of the tumbling classes were given in the gymnasium and at the theater.

From these experiences, Dr. Gwathmey wrote his manuscript, entitling it, "Tumbling for Amateurs." The book was published by the publishing house of the Methodist Episcopal Church South of Nashville, Tennessee. It can be obtained now in Spalding's Red Cover Series as No. 56R.

Dr. Gwathmey's book represents the first attempt in the United States to put in written form an explanation of the various tumbling feats, which up to this time had been handed down from one generation to another by verbal and imitative means. One hundred and twelve illustrations, made from snapshots taken on the Vanderbilt University Campus, supplement the description. The frontispiece is a photograph of circus tumblers practicing their feats. A feature of the book, which is of professional interest, is the arrangement of the activities in a progressive order of difficulty.

In the introduction of the book there are extracts from Dr. Gwathmey's professional associates, who now are well-known contributors to the physical education profession, namely, Dr. W. G. Anderson, Dr. R. Tait McKenzie, Drs. E. Hitchcock, Sr. and Jr., R. F. Nelligan, Carl Betz, William Stecher, Frank Pfister, Dr. Luther Gulick, G. W. Ehler, and Robert J. Roberts.

Dr. W. G. Anderson, at that time Associate Director of the Yale University Gymnasium, wrote ~

"I believe in tumbling as an exercise. It makes a man quick and agile, and very sure footed. It is a form of sport that is popular and perfectly legitimate when properly taught. We have no good book on the subject but need one. If such a work is to be presented to those interested in this subject, it ought to be written by a man who has had much experience in actual tumbling, who is familiar with the mechanism of the body, and who is educated. Dr. James T. Gwathmey of Vanderbilt University, Nashville, Tennessee, is just the person to compile a book on this form of gymnastics. He is a

clever performer, a teacher of wide experience, and an educated physician. I have looked over the MS. of the Doctor's new book and I endorse it." ¹

Dr. R. Tait McKenzie, then of McGill University, Montreal, Canada, remarked:

"I am glad to find some one ready and able to draw the veil from a branch of gymnastics which the professional acrobat has so long kept shrouded in mystery. The reducing of the various feats of tumbling to a progressive sequence and the analyzing of the various combinations, is indeed a difficult task; but your kinetoscope method of illustration will make clear what would otherwise require pages of description." ²

Carl Betz, supervisor of Music and Physical Training of Kansas City, expressed some prevalent opinions of tumbling in his remarks:

"If the element of danger in tumbling is greater than is consistent with the needs of physical education as some claim it is, then your book giving such minute illustrations and photographs of the body passing through the different stages of each exercise, cannot fail to reduce that danger to a degree which every interesting gymnastic exercise must contain. **I**, therefore, cheerfully recommend your interesting and timely little book to all who may wish to learn and practice the delightful pastime of tumbling." ³

Though Dr. Gwathmey's name today is associated with important medical discoveries and practices, rather than with tumbling, and his medical-career has taken him away from his early teaching experiences, he has remained interested in tumbling. He writes: "I still think it one of the best exercises and certainly one of the most attractive. It will unquestionably give anyone as good an all around development as can be gotten from any form of exercise." ⁴

¹ Gwathmey, J. T. *Tumbling for Amateurs*. No. 56R. Spalding's Red Cover Series of Athletic Handbooks. New York, American Sports Publishing Company. p.50.

² *Ibid.*, p. 50.

³ *Ibid.*, p. 52.

⁴ A letter by Dr. Gwathmey to the authors.

Tumbling, as a physical activity, was found during these earlier years in the Turnvereines of America. According to Carl B. Sputh, president of the Normal College of the American Gymnastic Union, the societies practiced pyramid building almost from the time the Turnerbund was organized in 1848. Dr. Sputh¹ says, "After 1900 the larger societies organized classes in tumbling and gradually the movement grew until now every society in the American Turnerbund devotes considerable time to the teaching of tumbling to both sexes."

In the Y. M. C. A. gymnasium at New Castle, Pennsylvania, in 1893, a circus troupe interspersed their practice upon triple horizontal bars with tumbling. William J. Cromie, a young member of the Y. M. C. A., upon witnessing their feats, became interested in tumbling and was fortunate enough to receive instruction from members of the troupe.

This efficient training started Mr. Cromie on a teaching career in tumbling. In 1897 he originated a tumbling device called the "elephant." Mr. Cromie describes the "elephant" as an "instrument composed of parallel bars upon which was piled from four to six mats. During a run with a take-off from a lively spring board, all forms of vaults, dives, and hand springs were performed on and over the 'elephant'."²

In 1923 Mr. Cromie became the author of "Pyramid Building" which is published by A. G. Spalding in the Red Cover Series as No. 52R. Part I of the book is devoted to pyramids without apparatus and Part II to pyramids with wands, chairs, and ladders.

Largely through Mr. Cromie's efforts, tumbling has been taught at the University of Pennsylvania to both men and women for over twenty years.

When American society first realized that school and city life were depriving the child of his right for physical activity, it was unprepared to offer a directed curriculum in organized physical activity in the public schools, and, therefore, borrowed from European nations their systems of physical exercise.

¹ A letter by Dr. Sputh to the authors.

² A letter by Mr. Cromie to the authors.

Tumbling was not included to any extent in the physical training of this period. In the beginning of the twentieth century, however, due probably to the influence of the physical training work in the colleges, some of the high schools and a few of the elementary schools introduced tumbling. In 1903 tumbling and stunts came into the senior high school in Philadelphia with the appointment of the first teacher of physical education for boys, and in 1907 were included in the elementary school program. In 1910 they were made a part of the physical education program in Atlantic City. Several high schools in Los Angeles were using tumbling as a club activity, more or less extra-curricular, in connection with heavy gymnastics in 1912, and, about this time, the same situation was occurring in the St. Louis high schools.

The addition of stunts and tumbling to the physical education program received added impetus when leading physical educators began to advocate a curriculum in physical activity in the American schools which was based on racial needs, interests, and activities, and directed by educational principles. The result of the philosophy of such men as Dr. Thomas D. Wood and Dr. Jesse Feiring Williams led to the physical education program of today, commonly known as the natural program. The foundation of the program is natural activities, those activities which have been indulged in with satisfaction by the race since the beginning of time. Stunts and tumbling were classified as desirable activities for the natural program, and with the acceptance of the twentieth century theories were introduced widely in the curricula of the public schools. In 1914 stunts were initiated in the Detroit elementary schools, and, about this time, they were being used in the Cleveland schools. In 1921, Los Angeles included stunts and tumbling as a part of a decathlon program. St. Louis and Indianapolis have recently added stunts and tumbling to their revised courses of study.

In 1921 the first book on stunts was published by N. H. Pearl and H. E. Brown. All through boyhood, Norton H. Pearl saw the men, young and old, of his rural community, thirty-six miles from a railroad, spend many a happy hour at-

tempting to do stunts. The zest of the participants was stimulated ever so often by the coming of the old wagon circus that passed through the country, such as Wixom's, which was the first one Norton saw. He began to participate in the stunts when only five or six years old and readily became proficient in them.

As he grew older, his interest turned to physical education and, in 1914, Mr. Pearl became supervisor of physical education in Detroit. Faced with the problem of no elementary school gymnasia and no physical education teachers, he drew upon his boyhood experience with stunts to meet the situation, using a method which his rural community had taught him. As he visited the schools, "the principal would assemble all the sixth, seventh, and eighth grades. From this group volunteers would come out to do stunts." ¹ In addition, captains from each school met in groups with Mr. Pearl to learn new stunts, which they, in turn, would take back to their school to show the other boys. Within a year's time, the program included the girls and was extended to all the grades.

Then the World War came and passed. Captain Pearl returned to his work, sensitive to national needs. He became gravely concerned over the physical inactivity of the city boy with the accompanying lack of knowledge of traditional boyhood activities and deterioration of important character traits. With the realization that there was a need in physical education for activities for which the boy would have a natural impulse to engage in, which would promote a desirable competitive interest, and which would result in constructive effort and definite accomplishment, he organized a program which included stunts and athletic events, administered so as to promote self improvement and competition with others. Demonstrations were given in Detroit and other cities.

As a result of this work, Captain Pearl and Captain H. E. Brown, assistant supervisor of physical education, wrote the book, "Health by Stunts." ² The book contains many of the old

¹ A letter by Mr. Pearl to the authors.

² Pearl, N. H., and Brown, H. E. *Health by Stunts*. New York, Macmillan Co., 1921.

familiar stunts, preserving a racial culture which was in danger of being lost.

Around 1920 the schools, whose special purpose was the training of physical education teachers, began to include stunts and tumbling in their curricula. Dr. C. O. Carlstrom,¹ president of the American College of Physical Education, says that tumbling always has been included as part of the general gymnastic program of the school, but has received added impetus in recent years. They were taught first in the Central School of Physical Education in 1921, and in the Normal College of the American Gymnastic Union in 1920-1921. Today, instruction in stunts and tumbling is accepted generally as a necessary part of the preparation of teachers of physical education in the physical education departments of universities and teachers colleges.

There was not general acceptance of stunts and tumbling as desirable activities for girls until after 1920. In 1926 the authors published the first book on tumbling and stunts in the United States which was written especially for girls, entitling it "Tumbling, Pyramid Building and Stunts for Girls and Women."²

The twentieth century has developed a new use of stunt and tumbling activities. In this age of scientific measurement in education, stunts and tumbling have been used by physical educators in the testing program.

In 1927 Dr. David Kingsley Brace devised his Scale of Motor Ability Tests. The purpose of the tests is to measure native motor ability, "that ability which is more or less general, which is more or less inherent, and which permits an individual to learn motor skills easily and to become readily proficient in them."³ Dr. Brace selected stunts as the test elements for the Scale and his choice was supported by the opinion of seventy-five physical educators, who ranked tumbling and stunts first out of ten typical physical education activities as being the ae-

¹ A letter by Dr. Carlstrom to the authors.

² Cottrel, B. and D. Tumbling, Pyramid Building and Stunts for Girls and Women. New York, A. S. Barnes and Co., 1926.

³ Brace, D. K. Measuring Motor Ability. New York, A. S. Barnes and Co., 1927, p. 15.

tivity in which skill in performance best expressed general motor ability.

In several instances, it is found that the racially old activity of tumbling has been selected to test the physical efficiency of the twentieth century girl. In the Physical Efficiency Test for Freshman College Women, which was devised by Miss Agnes Wayman¹ and adopted by the Eastern Society of the Association of College Directors of Physical Education for Women, tumbling activities are used as part of a motor ability test. This test, in turn, is combined with a medical and an anthropometric test to obtain a rating of the college girl's physical efficiency. The tumbling activities selected for the test are the Forward Roll, Backward Roll, Headstand, Handstand, Cartwheel, and Hand Spring.

The Women's Division of the National Amateur Athletic Federation has included stunt and tumbling activities in its Physical Achievement Test for Girls and Women which, according to the Foreword of the tests, "are designed primarily to measure physical achievement and motor ability."

SUMMARY

From prehistoric time to the twentieth century tumbling has been an activity of the people. As such, its career has been so varied that its history makes a fascinating story. In a kaleidoscopic manner its position in the lives of people has ranged from that of being an instigator of emotions at religious ceremonies to that of being a measuring tool in the twentieth century testing program in educational institutions. The scenes of its performances have changed from temples to theaters; from street corners and side shows of the common people to courts of kings and queens; from banquet halls to agricultural fairs; from circus lots to school gymnasias. Its roles have been religious, mirthmaking, and educational. Its participants have

¹ Wayman, A. *Education Through Physical Education*. Philadelphia, Lea and Febiger, 1928, p. 309.

² Committee on Tests for Motor and Organic Efficiency. *Physical Achievement Tests for Girls and Women*. New York, Women's Division, National Amateur Athletic Federation of America.

been both common people and royalty. The fortunes of its performers have varied from lean to prosperous years; their status has fluctuated from the heights of honor to the depths of damnation.

But throughout its varied career tumbling has had one unbroken line in history. It has played a part in the lives of people in various forms in every age. Always, it has touched a human cord in the onlooker and participant regardless of their status, that ageless cord of human interest in manipulating the body.

CHAPTER II

STUNTS AND TUMBLING AS PHYSICAL EDUCATION ACTIVITIES

CONTRIBUTIONS OF STUNTS AND TUMBLING TO THE PHYSICAL EDUCATION PROGRAM

THE physical education program today is an organized effort to recognize and fulfill through physical activity the needs of man, who for many ages has remained biologically the same, but who has been required to make many physical and social adjustments to an altered and complex environment.

In undertaking such a purpose, physical education becomes an integral part of the total education of the individual, contributing by means of physical activity to a richer and fuller life physically, mentally, emotionally, and socially.

The physical education program is made up of a variety of activities through which it aims to satisfy: (1) physical needs, promoting physical growth, development, and conditioning of the individual by favorably affecting fundamental muscular, organic, and nerve structures; (2) intellectual needs, offering opportunity for mental development and the enlargement of the range of knowledge by stimulating mental activity on the part of the students; (3) social needs, contributing to the social development and adjustment of the individual by providing opportunities for valuable social reactions and relations.

Stunts and tumbling have been accepted as one part of the broad physical education program for girls and boys in the elementary schools and high schools, and for young men and women in colleges. As such, their purpose is to contribute to the above aims of physical education.

From the physical viewpoint, tumbling activities involve the big muscles of the body. Through the use and development of these fundamental muscles the organic systems are developed and stimulated to function properly. Likewise, the nervous system is favorably affected; since the nerve centers which control the action of such muscles are fundamental centers of the nervous system. Through tumbling activities a neuro-muscular development takes place which results in skill in the use of the body.

From a psychological viewpoint, stunts and tumbling have a place in the physical education program because they appeal to the innate interest of many students. To participate in such activities is satisfying to individuals ranging from the elementary school child to the college student. The source of this satisfaction is that interest, common to most of mankind, in manipulating the body, in testing self for accomplishment, and in the expression of self through physical activity.

In addition, stunts and tumbling have definite contributions for the social development of the individual. Many of the activities involve group contact and action. The performance of these activities requires such desirable social traits as cooperation, leadership, followship, initiative, resourcefulness, dependableness, and the ability to adjust.

As with all other activities in the physical education program, whether stunt and tumbling activities have mental contributions depends entirely upon how they are taught. These activities often present problems which must be overcome before performance is accomplished. Under correct guidance of an efficient instructor, the content of these problems may lead the student into realms of related knowledge, such as physics and rhythm, etc. Participation on the part of the students in the solving of the problems necessitates active thinking and offers opportunity for the development of mental techniques.

A survey of the above statements discloses the fact that stunts and tumbling as activities in the physical education program are evaluated on other bases than merely that of providing exercise and a training in technical skill. If they were

taught from this latter viewpoint only, their contributions greatly would be minimized. **In** other words, stunts and tumbling cannot be ends in themselves. As such, they have no place in the physical education program. On the other hand, they must be physical activity means through which the whole student as a unity is to be educated.

OBJECTIVES OF STUNTS AND TUMBLING

To meet these requirements, the outcomes sought for stunts and tumbling as part of the physical education program must take into consideration physical, mental, and social development. The objectives of stunts and tumbling, written in terms of student accomplishment, may be expressed in the following manner:

1. To develop the body physically through participation in big muscle activity.
- ~. To develop the sensori-muscular system, the accomplishment of which will result in such qualities as agility, flexibility, balance, strength, poise, and control of the body.
3. To participate in a satisfying physical activity offering opportunity for accomplishment in the manipulation of the body.
4. To enlarge the range of knowledge and to develop desirable mental habits and techniques.
5. To participate in an activity providing opportunity for the development of desirable social relations and reactions.
6. To develop desirable character traits as initiative, courage, desire for accomplishment, leadership, and fellowship.
7. To participate in an activity providing recreation.
8. To develop a rhythmic sense.

Whether these objectives are realized or not depends entirely upon the efficiency of the instructor, the direction and distributions of the teaching efforts, and the procedures used. The remainder of the book is devoted to the subject of the teaching of stunts and tumbling with the aim of aiding instructors to realize more effectively the objectives set forth. The subject matter is not limited to the development of technical skill only, but includes also the aspects of the mental and so-

PHYSICAL EDUCATION ACTIVITIES

cial development of the student. Throughout the treatise, the whole student as a unity is considered, not just his physical make-up. The fact is kept foremost that when a student is engaged in learning a stunt or tumbling activity he is reacting mentally and socially, as well as physically. To fulfill the purposes of physical education, these reactions must be directed into desirable channels. They are as much a responsibility of the instructor as are the motor reactions of the student attempting to learn the activity. Because of this integration of the student, the subject of teaching stunts and tumbling cannot be separated from the subject of teaching the student as a whole.

THE PLACE OF STUNTS AND TUMBLING IN THE PHYSICAL EDUCATION PROGRAM

In defining the place of stunts and tumbling in the physical education program, the following-factors are considered:

1. The character of the activities.
2. The adjustability of the activities to students' capacities, abilities, and needs.
3. The students' reaction to the activities.

Stunt and tumbling activities require the manipulation of the body. The body is used as an instrument of expression and accomplishment. It is rolled, inverted, balanced, flipped, and put into many unusual positions for both stationary and locomotive purposes. The performance of such activities requires of the individual agility, flexibility, balance, strength, or a combination of two or more of these qualities.

Because of the nature of the various activities, the body build and the individual's ability to use the body become important factors in the participation and accomplishment in stunts and tumbling. Some individuals are limited in capacity because of their physical structure, such as short arms, or extreme heaviness from the pelvic girdle down. On the other hand, stunts and tumbling, because of the diversity of elements involved in the various activities, require a range of skills in the use of the body. This diversity of requirements makes it possible

for a larger range of individuals to realize success than if only one type of skill were involved. It is not necessary for all individuals to be successful in all types of activities or even to participate in them. Just as all students cannot be expected to succeed in the high jump, neither can all be expected to be able to do the Handstand.

Ability to use the body is affected by age and experience. It is a well-known fact that the child's body is more flexible than the average adult's and, hence, is well adapted to many stunt and tumbling activities. The normal child of elementary school age is very active and is interested in manipulation of the body. For these reasons, stunts and tumbling are considered appropriate activities for elementary school children.

Generally speaking, if the individual has had a history of physical activity during elementary school years, the more skillful he is in the use of the body as he passes through adolescence and reaches maturity. Individuals of this type will be able to progress in tumbling activities in high school and college. There are many other individuals who, through a lack of a proper physical education program in their earlier school careers, are introduced to organized physical activities for the first time in high school and college. In many instances, when stunts and tumbling are offered to these individuals, definite learning takes place, resulting in 'average to above average in accomplishment.

Stunts and tumbling can be adjusted to different age and ability levels because the activities are progressive in nature. In fact, progression is very important in the teaching of the activities. The work advances from easy to more difficult, and from simple to more complex, elements. Another aid to the adjustment of stunts and tumbling to students' abilities and needs is the possible ways of organizing the students for participation in the activities. Different stages of development and ability on the part of the students can be recognized by the use of skilled and unskilled groups and the adaptation of the lesson to the needs of each group.

Students' reactions to stunts and tumbling are a psychological element which should be recognized in considering them as

physical education activities. **In** general, the majority of younger children, both boys and girls, like them. Usually, they are popular activities during the period when there is interest in self testing. There are some children, however, who do not care for them. Examination of such cases usually reveals a lack of skill due to body build or background, or an unfavorable conditioning to the activities caused either by an injury received at some time or undesirable procedures used in the presentation of them.

Stunts and tumbling, generally, are not as well liked by as large a range of students in the high school as in the elementary school. Here, again, the explanation for the negative reaction to the activities lies to a great extent in the lack of skill. Body structure and a lack of activity in the history of the individual are deciding factors.

These same conditions apply also to the college age student. **In** case of the unskilled individual there is a growing lack of confidence in the use of the body. Inhibitions and fears hold sway. There are some individuals, however, who are eager to take advantage of their first opportunity to enter tumbling activities. These individuals, at the age of eighteen years and above, learn to stand on their heads, perform Forward and Backward Rolls, and many other tumbling skills. The student who enters college skilled in tumbling usually values the opportunity to continue to participate in the activity.

In light of the above facts, the following conclusions are drawn in prescribing the place of stunts and tumbling in the physical education program.

Stunts and tumbling have an accepted place in a well-rounded physical education program. This place, however, should not be over emphasized to the neglect of other physical activities which have specific contributions to make. **In** the elementary school it is customary to expect all normal children to participate in the physical education activities. Stunts and tumbling are included in this policy, for they are considered safe activities under the guidance of a qualified physical education instructor. The same degree of success and the same re-

gard for the activities should not be expected of all students. As in the training for all fundamental skills, careful teaching in stunts and tumbling in the elementary grades is necessary to lay a firm foundation for the proper technique in the use of the body and to help the students with their problems in regard to the activities in an attempt to build favorable attitudes toward participation.

When the high school program is built on the principle that the students should be exposed to a large range of activities, participation in stunts and tumbling can be required in the same manner as in other physical activities. A diversity of activities belonging to the realm of tumbling should be offered in an attempt to bring success to a larger group, and, likewise, the organization of the class should be such that the needs of both skilled and unskilled, experienced and inexperienced, students may be taken care of. A tumbling club, as an extra-curricular activity, serves well as a means of giving the skilled students, or those who have a greater interest in the activity, an opportunity for more participation and development.

In college, where it is deemed desirable to permit specialization to some extent, at least, in the students' participation in physical education activities, tumbling can be offered as one activity in a rich physical education program. Participation in such a course should be voluntary. The same careful selection of activities and organization of the class is needed here as in high school. If enough interest is displayed in tumbling, it makes a desirable activity for a club or for one phase of the Athletic Association.

•

CHAPTER III

TEACHING PROCEDURES FOR STUNTS AND TUMBLING

CONSIDERATION the teaching of stunts and tumbling involves both the learner and the teacher, for it is a true state... ment that there is no teaching unless there is learnin . Hence, the student IS o utmos Impor ance in the teaching process, as is, also, the teacher. Teaching of stunts and tumbling offers no exception to this fundamental principle. In this chapter the student's reactions while learning and the teacher's function in the teaching process are discussed for the purpose of guiding the teacher.

A. MOTIVATION

As plans are being made for the teaching of stunts and tumbling, one of the first questions which confronts the instructor is: Are the students interested? This question must be considered and answered, for the answer determines the future procedure of the instructor.

Interest is recognized as a most vital factor in the learning' process. It acts as a powerful motive force, inciting the child to active participation. The instructor who bases the teaching of stunts and tumbling on modern educational principles is not satisfied with obtaining physical activity only from a well disciplined class, but seeks ever to reach the desired goals through real interest and desire on the part of the students.

Stunts and tumbling are interesting in themselves to a great number of students. They are, in this case, self motivating, because students are interested in them from their own initiative. With these students the instructor's work is facilitated greatly, for due to this spontaneous and inner interest they are ready to learn. When such is the case, time and effort

on the instructor's part should not be spent in superfluous motivation, but should be devoted to actual teaching.

All students may not display this desired interest in stunts and tumbling. When this is known, it is essential that the instructor analyzes the cause of noninterest in order to plan further procedure. The most common causes fall in the following classification:

1. Lack of enjoyment in certain types of physical activities.
- ~. Fear.
- 3. Lack of ability.
4. Unpleasant sensations, such as dizziness, nausea, and headache, after participation in certain activities, especially those requiring revolutions of the body or inverted positions.

Students displaying the above reactions are conditioned in regard to the learning of stunts and tumbling. The task of the instructor is to redirect and recondition them. The problem is to arouse in the students a motive for learning the activities which, in turn, creates a desire to accomplish and an attitude of wanting to participate in the learning situations. When this is accomplished, the students, psychologically speaking, are in a state of readiness to learn. This state of readiness is most essential, for it opens the gates for possibilities to learn on the students' part.

The most efficient way to motivate the students is to draw upon their innate and natural interests. Any plan of motivation which is based upon these interests is anchored soundly. What, then, are the various interests that are common and natural to man? Following is a classification made by Parkerr "

1. Interest in adventure and romance.
- ~. Interest in actions of people and animals.
3. Desire for social approval.
4. Interest in rhythm, rhyme, jingle, and song.
5. Curiosity, wonder, puzzle interest, problem interest, mental activity.
6. Interest in expression and communication.

¹Parker, S. C. *General Methods of Teaching in Elementary Schools*. New York, Ginn and Co., 1919, p. 214.

7. Manipulation and general physical activity.
8. Interest in collecting.
9. Imitative play.
10. Interest in games.

A survey of the above list discloses useful sources for motivation for the teacher of stunts and tumbling. Interest in action of people and animals and love of imitative play may be carried over to stunts and tumbling by initiating the students into stunts which involve imitation, such as the Frog Hop, Duck Walk, Rabbit Jump, Bouncing Ball, Wheelbarrow, 'Top,' and others.

Stunts oftentimes appeal because of their rhythmic quality. The Rocking Stunt, Opening of the Rose," and Merry-Go-Round are illustrations of stunts of little difficulty which appeal because of rhythmic interest. Again, music is a direct aid in motivating students and in promoting the learning of stunts.

That innate interest in manipulating the body finds its expression in such stunts as the Rely-Poly,' Dwarf Walk,s Tangle, and others.

Placing stunts into game situations often appeals because of the natural interest in games. Run the Scale game is an illustration of an interesting one involving the performance of a simple stunt. This game and other illustrations may be found in Chapter XI. The use of interest in rhyme, jingle, and song is found, also, in Chapter XIV.

To counteract previous conditioning of students and to aid in motivation, the following guides are noteworthy:

1. Start with an activity which all students can do. Initial success is most essential to the learner. There must be a feeling of satisfaction accompanying the attempt to perform the activity. This feeling comes with success. Psychologists confirm this in their recognition of the Law of Effect, which holds that if there is satisfac-

¹ Pearl, N. H., and Brown, H. E. *Health by Stunts*. New York, The Macmillan Co., 1921, p. 118.

² *tu*«, p. 918.

³ Cotteral, B. and D. *Tumbling, Pyramid Building, and Stunts for Girls and Women*. New York, A. S. Barnes and Co., 1926, p. 69.

⁴ *Ibid.*, I- 48.

⁵ *Ibid.*, p, 42.

tion the student will have a tendency to repeat the activity. The first activities should be chosen carefully, therefore, to be within the capacity of the students. Knowledge on the instructor's part of the difficulty of activities is necessary. See Tables I and II, pages ~77-~80, for the ranking of stunts and tumbling activities.

~. Start with the present knowledge of the students and proceed from that point to new fields. This rule is based on the accepted educational principle of proceeding from the known to the unknown. For example, in the presentation of the Backward Roll draw upon the student's knowledge of the Forward Roll.

3~ Activities must be within the range of the students' abilities. Students at the extreme low end of the ability curve of the class must be provided with activities which are within their capacity, and, at the same time, students at the upper end must be given opportunity to participate and progress in performance of activities within their capacity. This fact necessitates proper and efficient classification and organization of students for participation in stunts and tumbling activities. See Chapter IV.

4. Allow for physical differences in individuals. Students vary in height, weight, size, and body build. On the other hand, stunts and tumbling activities vary in the demand which they make for body manipulation. All students cannot be expected to perform successfully all types of activities. The overweight student is unable to do stunts of the nature of the Corkscrew/ the Folded Leg Walk,² and Through the Stick" stunt. The slender type of student with little muscular strength should not engage to any extent in such stunts as Andy Over⁴ or Churn the Butter," which require supporting the weight of a companion. Consider each individual as a separate problem in respect to physical characteristics. Analyze each activity and judge the requirements which it makes upon the student for successful performance.

5. Anticipate the need for safety measures and take precaution against unnecessary injuries. Injuries often result in inhibitions, fear, and dislike for the activities. See Chapter VI, pag~ 13~, for further discussion of safety regulations.

6. Be ready to help a student analyze a prevailing fear. Guide

¹Pearl, N. H., and Brown, H. E. *Op. cit.*, p. 99.

²Cotteral, B. and D. *Op. cit.*, p. 43.

³Pearl, N. H., and Brown) H. E. *Op. cit.*, p. 98.

⁴Cotteral, B. and D. *Op. cit.*, p. 51.

⁵*Ibid.*, p. 44.

the student to face the fear squarely and when the cause is discovered outline a procedure to dispel it. This may necessitate building up the ability of the student progressively through graduated exercises to meet the problematic situation. With success comes self confidence and interest.

7. Distribute wisely in the lesson activities which are apt to result in unpleasant sensations. Undue amount of revolving activities may cause dizziness, headache, and even nausea. Proper time allotment and well-planned distribution of such types of activities are essential. For instance, a practice in rolling should be followed by an entirely different type of activity, such as balances. Inverted positions as in the Headstand, Handstand, etc., should be held for only a reasonable length of time. Build the students up gradually to the activities requiring complete revolutions of the body through such activities as the Tuck-Up, the Snail Stunt,¹ the Shoulder Rest,² all of which require only partial revolutions and inversions.

8. Permit participation in stunt and tumbling activities only to students who are in good physical condition. This requirement includes participation only after a reasonable length of time has elapsed after eating. Proper waste elimination is necessary, also, before participation.

To summarize, it is essential that students be interested if they are to engage in stunt and tumbling activities. Interest puts the learner in a state of readiness, of expectancy, and of anticipation which definitely aids learning. If interest is present due to the student's initiative, the instructor's efforts can be directed immediately to the teaching. If it is not, it is necessary for the instructor to analyze causes of noninterest and then constructively plan to create an interest by motivation which is based on innate and natural interests.

B. PRESENTATION

By presentation of the stunt or tumbling activity is meant putting before the students a picture of the activity which is to be performed. This picture is essential before any learning takes place. The presentation, therefore, if well planned, acts

¹ Cottrel, B. and D. *Op. cit.*, p. 46,

² *IU*, p. 46.

as a direct aid to the learning of the activity. If, however, it does not accomplish its purpose it becomes a stumbling block to the learner. Therefore, it is important that the instructor has a definite and accurate concept of the activity to be presented, and that time and care are taken to plan the presentation so that each student has a concise and complete picture of the desired performance. This picture may be given through visual aids, verbal aids, and a combination of the two.

I. VISUAL AIDS

Visual aids include demonstrations and illustrations. Demonstration of the activity by the instructor or a qualified performer of the class is an excellent means of presenting the activity. Children learn by imitation to a great extent, and the learning of older students, likewise, is influenced and facilitated by seeing the performance of another. Thorndike ¹ says the chief danger in teaching form is the neglect of imitation. The performance flashes a picture of the motor movements which make up the activity, and shows those movements in their rhythmic relationship for the accomplishment of the activity. As a result, a concept of the activity as a unit is gained. Definite effort should be made to use demonstrations.

If there is any doubt about the success of the performance for demonstration purposes, it is best not to attempt it, for a failure or inaccurate result will handicap materially the learners. If the entire activity cannot be performed, it oftentimes is possible for the instructor to supplement the description by demonstrating certain positions of the body required in the activity. For instance, if the instructor cannot do the Fish Flop, as the explanation is given the position for the start of the Backward Roll can be taken and the body rolled up. Coming out of this position, the body can be placed lengthwise face downward in the final position.

Illustrations may serve as visual aids in the presentation of the activity. Motion pictures, photographs, kodak pictures, schematograph drawings, and free hand drawings may be used

¹ Thorndike, E. L. Principles of Teaching. New York, A. G. Seiler, 1906, p. 220.

successfully. Needless to say, the illustrations selected must be accurate reproductions of the desired performance. If the instructor has to point out inaccuracies in the illustration, it is apt to cause confusion and inhibitions. For presentation purposes the learner must have positive pictures of the correct performance. If the illustrations meet this requirement, their value lies in the fact that they may show accurate static positions of the body in certain parts of the activity, as, for instance, the Tip-Up position for the Headstand and the starting position for the Double Roll; or they may show proper form in action, as the tuck-up of the Forward Roll. A sequence of positions and actions is desirable.

. Almost every class offers available material for illustrations and, if an instructor wishes to build up a useful supply, advantage should be taken each year to increase the number.

To gain maximum results from the demonstrations and illustrations the following suggestions are given: .

1. The performance should be in the exact form which the instructor wishes to secure in the learner. The first concept must be a correct one in order to promote the formation of proper habits from the beginning.

- ~. The demonstration should be in plain view of the learner. The students should be organized to the best advantage to allow this. The organization of the students in file formation usually results in those in the rear failing to see the whole performance .:

3. The demonstration should be repeated several times to insure as clear and complete pictures as possible. Most individuals cannot carry an accurate concept of a motor activity by seeing the performance once. A kinesthetic feeling grows with additional pictures.

4. Various views of the performance should be given. The relationship of the learners to the demonstrator influences the picture obtained. It should be remembered that a demonstration may present a side view of the performance to some, a front view to some, and perhaps a back view to others, depending upon the organization of the students. If the students are stationed at varying angles in relation to the activity, the demonstrator should repeat the performance, changing the view until all students get the complete picture.

II. VERBAL AIDS

. Verbal aids include descriptions and explanations of the performance of the activity. They may be used as the only means of presenting the activity, or in connection with the visual aids. The purpose of the verbal aids is to produce a motor word picture of the activity for the students.

A desirable way of using verbal aids is to have the students participate, within the limits of their ability, in forming the picture through discussions. In this case, the instructor calls upon the previous experience and present knowledge of the students as a basis for the desired new concept. The advantages of this method lie in the facts that relationships of knowledge are established and used; by active participation the picture is more apt to become a part of the learner than if artificially superimposed by the instructor; contributing to the discussion tends to add interest on the part of the learner; and, finally, the instructor gains a picture of the learner's concepts.

For instance, the Backward Roll is to be presented. The students have learned the Forward Roll. To open the discussion the instructor may ask, "What did you do in order to roll forward?" A student may answer, "I pushed with my hands and feet and kept rolled up." Another student may add, "I tucked my head down and made myself into a ball." The instructor then may inquire, "What will be necessary for you to do to perform a Backward Roll?" Typical answers may be: "Keep yourself rolled up like a ball and roll over backward." "You have to push with your hands." During this part of the presentation it is desirable to give the students opportunity to ask intelligent questions.

After such a discussion, it is essential that the instructor summarize by giving a final definite word picture.

To make the use of verbal aids effective, the following suggestions are given:

1. The terms used in the presentation must be chosen carefully. The criteria by which to select terms are:

- a. They must be accurate. For example, in the Rocking

Stunt, the individual should be told to sit on the feet of the partner, not on the legs.

b. They must produce a motor picture in the minds of the students. For example, a part of the Cat Walk can be described in this way: "The cat hunches its back by taking very small steps with alternate back feet, thus bringing them closer and closer to the front feet."

c. They must be within the learner's experience. A meaningless word brings no result, but only adds mental confusion. For example, in teaching a primary class, the following description would be of little value: "The movements of the arms and legs are coordinated."

~. The terms which result in correct performance of the activity for some students are not effective for others. Individual differences must be considered. The instructor should watch the results of the selected directions in terms of motor activity on the part of the students, and should be ready to supplement, or substitute, other terms when necessary.

3. Use should be made of the name of the activity, if possible, to give a proper psychological setting, and to aid in forming concepts. The following description for the Roly-Poly" stunt is an illustration of this: "The Roly-Poly is the name of little toy figures which are weighted down so that when they are tipped over they always come back to their original positions. Salt and pepper shakers representing characters sometimes are made in this way. In the Roly-Poly stunt, the person represents one of these Roly-Poly figures. He tips over to one side, rolls over on the back to the opposite side, and up he comes finally to his original position."

4. The description and explanations must be heard by all students. An instructor observing this rule will organize the students so that all will be in the most advantageous position to hear what is said. Likewise, the instructor will take the best position in relation to the students as the activity is presented. This rule eliminates such a position as standing in the center of the circle and talking with the back turned to some of the students, or standing between two lines of students, which are facing each other, and directing the talk to one line.

5. The instructor presenting the activity should be seen by

all students. Using the above illustrations, if a circle is necessary, the instructor should stand practically as a member of the circle. If the students are in two lines facing each other, the instructor should stand slightly beyond one end of the lines, at a central point between them. Chapter IV, page 100, illustrates the proper position of the instructor in relation to the class.

6. The words should be enunciated distinctly and spoken at a slow enough rate of speed to be understood.' The voice should be pitched correctly to be carried over the necessary space and yet be pleasing.

7. Descriptions and explanations should be reasonably short. This suggestion applies especially to children whose attention spans are short, but also can be observed to advantage with all students.

8. The initial presentation should give the larger aspects of the complete movement, rather than too detailed and analytical description of the different parts. The attention of the learner should be kept on the whole result, rather than on too minute operations.

/ 9. The descriptions and explanations should be in positive form, rather than negative. Positive form tends to promote activity, while negative form results in inhibitions. It is advisable to speak in terms of activity, rather than in terms of repression. For example, in describing the position of the individual's legs in the Double Forward Roll, it is better to say, "Keep the legs relaxed so the top person can bend your knees easily and place your feet on the mat," rather than, "Do not keep the legs stiff or the top person cannot bend your knees and place your feet on the mat."

10. Word pictures given in descriptive form are favored, rather than those given by formal command. Such terms as, "I want you to do this," "You are to follow my directions," have no place in the lesson, as they tend to emphasize the superimposition of the instructor's will upon the students who are expected to respond as commanded. Instead, it is more effective to speak in terms of the activity requirements.

To summarize, the instructor has the possibility of using visual aids, verbal aids, or a combination of the two in the presentation of stunt and tumbling activities.

C. PRACTICE

An individual learns a stunt or tumbling activity only by doing it. Self activity is the essence of learning. Repetition of the performance is necessary in order to make the learning permanent, because, according to the Law of Exercise, neuromuscular coordinations become established only after continued exercise of the elements involved. Practice, then, is a vital part of the learning process. It, therefore, is fitting that, after plans are made to motivate and to present the activity, the instructor next should provide for the practice of the activity by the students.

I. ADMINISTRATIVE ASPECTS OF THE PRACTICE PERIOD

The instructor is faced with such questions as these:

1. How long shall I have the students practice this activity today?
- ~. Shall I have the students drill on it for part of every class meeting for a certain length of time, or shall I place it in my lessons once a week?
3. Shall I present it as a unit of the course, concentrating on the practice until it is learned by the students, and then go to other activities?

Experimentation and scientific research in psychology have resulted in definite and valuable contributions to the fund of knowledge in regard to the place of practice in efficient learning. This knowledge is applicable to the teaching of tumbling, and the instructor who uses it as a basis in formulating class procedures facilitates learning on the part of the students.

A consideration of these findings and their significance to tumbling follows:

1. Practice should come as the result of a felt need on the part of the learners. Instead of announcing to the class, "We are going to practice the Headstand today," a wiser course is to offer a situation in which the students experience a need for the Headstand, and, at the same time, a realization of their lack of ability to per-

form it. This will result in a desire to practice the activity in order to perfect it.

~. Practice should be direct rather than incidental. The practice of an activity must be brought to the level of student consciousness. The student must have a clear idea of the goal of the practice, and must concentrate on it for most economical results. For example, the instructor may offer a tumbling game to the class which includes an activity, such as the Forward Roll. The game offers an opportunity for the students to use the Forward Roll in a situation, but the practice of it will be incidental. No reliance can be placed on the game to teach the Roll, because the student's attention and interest are on the game. At a previous time the opportunity must be given for direct conscious practice on the Roll to perfect it.

3. Short practice periods are more conducive to learning than long practice periods. The length of the practice period depends upon the strenuousness of the activity. No practice of an activity should be extended past the stage of fatigue. Children fatigue easily. Therefore, their practice periods should be relatively short. Again, the length of the practice periods depends upon the interest of the students. Shorter periods are favored for children, due to their short attention spans. If there is great interest in the performance, the practice period may be extended, providing fatigue has not set in, because whenever there is interest in the activity there is the possibility of learning. Progress usually is not made if the performance is carried into the stage of forced attention on the part of the learner.

4. Short intervals between practice periods are more conducive to learning than long intervals. Frequent practice periods bring better results than occasional ones. For instance, learning the Headstand is facilitated if the students are given opportunity to practice it frequently, rather than only at long intervals. As more perfection is gained, the intervals between practice periods may be lengthened.

5. Practice periods distributed over a long span of the course are more conducive to learning than those concentrated in a short unit of time. Experiments have shown that more permanent learning is gained if there is a greater time range in which learning is to take place. The instructor, who observes this fact, distributes the practice periods for rolling over a sufficient part of the course rather than concentrating on it as a unit and then leaving it for new material.

6. After accuracy is gained there must be opportunity for repetitions of the correct performance to make the learning permanent. The fact that a student does an activity correctly once does not guarantee permanent learning. Practice periods should not end abruptly, but should taper off with longer intervals between periods as mastery is gained. From this viewpoint, reviews are justified.

In summary, it can be said that short, relatively frequent practice periods, well distributed over a relative length of time, initiated by a felt need on the part of the students, and directed to a definite goal, promote learning.

A survey of the above facts discloses that an instructor of stunts and tumbling has responsibilities in regard to organization, time allotment, material, and teaching procedure, in relation to the practice period.

During the practice period the organization chosen for the activity should be that which permits the greater number of repetitions on the part of the students. Inefficient organization often results in an inadequate number of trials for the learner, and an undesirable amount of waiting for "turns." Such a question as the following one receives the attention of the alert instructor: "Am I getting the maximum use of the mats?" For instance, two students might be practicing the Forward Roll across the width of the mat, whereas before, one student was taking the Roll lengthwise of the mat.

Proper time allotment is important. The instructor who flits from one activity to another with the idea of covering material is offering a stumbling block to the learner. Dr. Williams¹ states, "The secret of good teaching in physical education is the correct use of drill in the fundamental movements at the proper moments and for an adequate length of time."

The number of repetitions depends upon the ability and needs of the students. Thus, individual differences involve classifying the students according to ability for practice at proper times. See Chapter IV.

One typical mistake of a beginning instructor of stunts and

¹ Williams, J. F., Dambach, J., and Schwendener, N. *Methods in Physical Education*. Philadelphia, W. B. Saunders, 1932, p. 127.

tumbling is to crowd too many activities into the lesson. The students are carried breathlessly from one activity to another. Barely enough time is given to participate. When questioned concerning this, the most common answer is, "I want to make the lesson interesting. I am afraid that the students will get disinterested if I drill too long on the activities." By this procedure, the students are "exposed" to a variety of activities, and before long the instructor is faced with the harassing dread of running out of material and the discouraging realization that the students have not become skillful in the fundamentals of tumbling.

II. STUDENT PRACTICE FOR IMPROVEMENT

Well organized practice periods are not sufficient in themselves to insure learning. More is needed than good organization, proper time allotment, and repetition in the practice period. There must be practice for improvement.

The aim of the practice period is improvement. Repetition, alone, of an activity will not guarantee accomplishment of this aim. In other words, the operation of the Law of Exercise is not sufficient in itself to insure progress. Whether or not improvement in skill results from the practice of the activity depends upon three factors: (1) the learner must have a capacity to improve; (2) the learner must work conscientiously for improvement; (3) satisfaction must result from correct motor responses, and dissatisfaction from incorrect responses. According to the Law of Effect, if the student's attempt to perform the activity is satisfying there will be a tendency to repeat that same performance; if dissatisfying, there will be a tendency to discontinue that particular response. The working of the Law of Effect, which is a potent aid to learning, also, becomes the motive force for improvement.

It is well at this point to consider what is taking place as an activity is being mastered. The definition of learning by Wynne ¹ applies well to tumbling:

¹ Wynne, J. P. *General Method: Foundation and Application*. New York, The Century Co., 1929, p. 146. By permission of D. Appleton-Century Co.

"Learning is the activity of the organism involved in the selection, repetition, and maintenance of a type of behavior from a number of responses which the organism is structurally capable of making."

It is true, indeed, that a variety of responses is possible when the student attempts a new stunt or tumbling skill. Observation of any tumbling class verifies this. For instance, the Backward Roll is demonstrated and explained to the students. When first attempting to perform it, the student may roll backward to a certain point, but is unable to complete the Roll, and becomes anchored on the head and shoulders. In the second attempt, the student may make a kicking effort with the legs, which results in arching the back and, again, the Roll is not completed. In the third attempt, the body is kept rolled up and a push with the hands against the mat succeeds in sending it over, so that the Roll is completed, but the student realizes that the direction has been inaccurate. In the next trial, the tendency is to repeat the successful rounding of the body, but an attempt is made to push evenly with the hands. And so the practice goes, involving selection on the student's part of the correct responses. The repetition of those responses tends to strengthen them and make them permanent, while the discontinuation of the undesirable responses tends to weaken them and, finally, to eliminate them.

Improvement in a stunt or tumbling skill involves the presence of the selective process, and, as perfection is neared, the quality of selection becomes finer, and the responses more permanent, as the result of repetitions.

It is essential, therefore, that the students are given opportunity in which to select their responses: in truth, a practice period in which self activity is emphasized under the guidance and leadership of the instructor. Some psychologists call this period "trial and error" learning, or what is a more positive term, "trial and success" learning. Burton ¹ says in regard to this type of learning:

¹Burton, W. H. *The Nature and Direction of Learning*. New York, D. Appleton & Co., 1929, p. 173. By permission of D. Appleton-Century Co.

when there is participation on the learner's part, is advocated by modern educators.

With the acceptance of this role, the function of the instructor becomes that of leading the student, within reasonable limits of ability, to evaluate the performance of the activity; to draw conclusions concerning the failure, 'and, upon these conclusions, to plan intelligently for improvement. The student's activity is supplemented by positive instruction by the instructor, who emphasizes the appropriate teaching points and focuses the student's attention upon the desired line of work. Better results are apt to be obtained if the terms used by the instructor are in positive form rather than negative. "Do not's" with their inhibitory effects are not worth as much as discussions in terms which create a motor picture and feeling for the correct performance.

This is a very different procedure from the one used by the instructor who offers "ready made" corrections to the learner. What is obtained by this method is a "ready made" tumbler, but, after all, only a tumbler. Much more desirable 'and useful is the increasingly intelligent student who can tumble as the result of learning to use the effective procedures in solving confronting problems.

Ruediger ¹ says, "A person cannot become adapted by passively receiving something but only through active participation. He should be led to find out things for himself, to question critically, in short to use his own judgment and initiative to the end that he may establish within himself progressive methods of work."

Again, Whitney ² states, "The best tools that education can give the growing individual is mastery of a method of dealing with new problems, habits of utilizing constructively all available information and knowledge, habits of clear thinking in forming judgments, and habits of acting on considered conclusions."

¹ Ruediger, W. C. *Principles of Education*. New York, Houghton Mifflin Co., 1910, p. 50.

² Whitney, Anne. *Health Education, Whither Bound*. *Journal of Health and Physical Education*, May, 1933, p. 39.

During this time it is advantageous for students to see the demonstration of the correct performance. Oftentimes it is advisable to have group discussions and criticisms of the problems presented by the attempts at performance. Such discussions act as a "clearing house" for misconceptions and ideas. As such, they are justified in the tumbling period.

As the student meets problems and attempts to overcome them, encouragement from the instructor is valuable. Here, again, it is emphasized that the words must be sincere and justified. Encouragement of this type should be given upon first opportunity so as to act as an incentive for further effort.

When a student is not able to perform a tumbling activity, it may be necessary for the instructor to organize the material into simpler units by which the student can progress successfully to the more difficult whole. For instance, the student may be having trouble with the stunt, Jump The Stick/ **In** this case, the following steps may be taken:

1. Without the wand, practice jumping and drawing the knees as close as possible to the chest while the body is in the air.

2. Start with the arms held in front of the body as if holding the wand. Now with a continuous sweep swing the straight arms down, under, and back, as the jump is taken. Are the hands passing at a lower level than the feet at the height of the jump? Do they swing through this path without a break in the rhythm? Are they timed correctly with the jump?

3. Try the complete stunt with the wand.

The underlying principle to keep foremost is that every student must succeed in something. Therefore, it is necessary to adjust the stunt and tumbling material to the present ability of the student. The instructor who insists upon a student attempting something which is beyond his ability violates a most important principle. Grading the activities progressively according to difficulty for individual needs is a definite aid to learning. A list of common stunt and tumbling activities, ranked according to difficulty, is found on page 277. A device

2 Pearl, N. H., and Brown, H. E. *Op. cit.*, p. 106.

for listing stunts according to individual student needs, which, also, serves as a motivation for progress, is found on page 71.

It may be necessary and 'advisable to organize the students according to ability for part of the practice for improvement, in order to give opportunity for handling problems of learning. See classification and organization of students, Chapter IV.

While many stunts have such definite requirements for their performance that attempts result concisely in "Success" or "Failure," many tumbling activities involve quality of performance. For instance, the Knee Dip ¹ is either done or not done, whereas the Headstand may be taken by a group and a range of quality of perfection can be seen in the performance.

Sometimes it happens that a student becomes satisfied with mediocre quality of performance. A certain stage of success is reached in performing an activity, and no desire is expressed for further improvement. Illustration of this often is seen in the performance of the Backward Roll. As the Roll is taken, instead of hands being placed on the mat correctly, the push is taken with one forearm and the opposite hand. A Roll results, but one which is lacking in fineness of perfection. In this case, the instructor's duty is to disturb this feeling of satisfaction. This is done preferably in a positive and constructive way by motivating further interest in perfection. It is true that, unless the drill is accompanied by a desire on the part of the student to improve and by a definite effort to accomplish, the level of the performance remains the same in spite of the exercise. Desire and effort to improve come when there is interest. The student must realize the worthwhileness of the perfected activity.

Devices for motivation of interest in improving quality of performance are:

1. Recognition of quality of skill by the instructor through words of approval.

- fl. Use of the student who has perfected performance to demonstrate an activity. Often the performance of a student acts as a greater incentive to the classmates than that of the instructor.

¹Pearl, N. H., and Brown, H. E. *Op. cit.*, p. 96.

3. Grading the performance of the activity on a basis of quality of performance. See pages ~74-~75.

4. Classifying the students into skilled divisions for part of the class work.

5. Competitions in which the performance of an activity is judged by quality of performance. See Chapters XII and XIII.

Again, there is the type of student who, though skillful in a certain number of activities, has apparently no desire to learn a specific activity, which is within the range of his ability, but which, so far, he cannot perform successfully. Compensation for lack of ability to perform a particular activity by an added enthusiasm in performing other activities successfully is seen commonly in a tumbling class. A valuable motivating device for improvement and enlargement of the student's repertoire of perfected activities is a chart, upon which is kept the names of the activities presented and a record of the student's success in perfecting them. Such a chart is motivating from two viewpoints:

1. The student has a record by which he can compete against himself and other members of the class. Knowledge of results usually acts as an incentive, especially, if there is a certain amount of success present.

~. The chart, showing the activities which will be presented in the course, gives the student a definite goal toward which to work.

Chart I, page 70, illustrates a checking system for recording the accomplishment of the student. In place of the checks a block system may be used. As the student masters the performance of the activity, the square space opposite the name and activity is colored, usually with crayon. Each student attempts to learn as many activities as possible and keep the line of colored blocks unbroken. The very fact, for instance, that the square representing the Cartwheel is not colored, when blocks on each side of it are, serves as a strong incentive to accomplish the activity.

ladder, after which the instructor gives him a new set of activities selected to fit his specific needs.

To summarize, the student's part in the practice for improvement and the instructor's part are outlined below.

<i>Instructor's Part</i>	<i>Student's Part</i>
1. Know definitely the correct way to perform the activity. Have a clear concept of what is to be taught.	1. Know definitely what is to be learned. Have a clear concept of the desired performance.
~. Present the activity by means of demonstrations, descriptions, explanations, etc.	~. Attempt to perform the activity.
3. Observe and analyze the performance as to mistakes and faults.	3. Evaluate the performance in relation to the desired goal.
4. Guide the student to participate in the determination of corrections, setting up definite goals to reach.	4. Participate in planning the procedure for further action and improvement.
5. Supplement the student's contributions with suggestions, instruction, demonstrations, etc.	5. Receive further instructions. See the desired performance again.
6. Have the student repeat the performance. Give the student opportunity for self-activity again.	6. Practice the activity.

D. METHODS OF TEACHING STUNTS AND TUMBLING

The teacher of stunts and tumbling is confronted with three elements, namely, the learner, the teaching materials, and the teaching procedures. The three are inseparable, as they closely are related to, and dependent upon, each other. It can be seen in the previous consideration of the learner, how often the discussion involved materials or procedures. Likewise, the discussion of method continually involves the learner and materials. The method, which is used, directly influences the type of learn-

ing and the outcomes sought. On the other hand, the learner and the objectives should be criteria for the selection of the method.

There is no one method of teaching stunts and tumbling. A variety of procedures is needed, because the instructor is dealing with a variety of types of individuals. The method which brings results for one group or one student may be negative for another. Whatever method is used in the tumbling class is justified only if it is based on educational principles and is acceptable in the field of education.

As the question of method is considered for a stunt and tumbling class, the instructor well may ask, "What are the purposes of the class? What means will make possible the realization of these purposes?" The fundamental criterion for choosing method is that procedure which will accomplish best the objectives set up for the class. The choice of method, then, should follow the acceptance of the goals for the class.

Consideration of the objectives for stunt and tumbling classes, listed in Chapter **II**, shows the need, not only of developing skills, but also of making the class an educational experience for the students. To accomplish this, the instructor has the responsibility of providing situations which result in opportunities for desirable student participation and in provisions for valuable social relations. What method of teaching best can obtain these results? Consideration of various methods follows.

I. FORMAL METHOD

The formal method is limited in its possibilities for realizing the above..Under the command-response type of procedure of the formal method, students are under the direct control of the instructor, participating only when directed by this outside force. Uniformity of action is sought. In the formal management of the class, there is little possibility for natural social relations.

II. INFORMAL METHOD

The informal method is the best means by which modern objectives can be accomplished. It is a procedure which takes cognizance of the fact that the individuals in the class are growing personalities forming a social group. The administration of the class permits socialized activity on the part of the students. Only that organization which is necessary to insure learning and safety in participation is used. The informal method promotes the development of the ability in the students for self-activity and self-direction: in other words, the ability to react intelligently to situations which confront them as participants in an activity and as members of a social group.

When first taking a tumbling group, it probably is best for the instructor to start with full control, then attempt as quickly as possible to determine the stage of development in the students for self-activity and self-direction. The stage of development acts as a criterion by which to judge the degree of self-activity and self-direction to be given the students, because it is essential that for every freedom accepted there must be a corresponding responsibility by the students for their relation to the activity, classmates; and instructor. If the informal method is superimposed upon the students before they are ready to accept the responsibility, the result will be disorder, confusion, and lack of accomplishment.

In the first meetings of the class and the instructor, adjustments take place between the students and the teacher. When the adjustment has reached the point where there is a feeling of oneness in the group, working toward an objective end, a firm foundation has been laid for the informal method. From this point on, the instructor may offer situations; progressive in nature, which will serve as opportunities for self-development in the students.

In the adjustment which takes place between the instructor and the students there is need for an understanding concerning some of the vital situations which will confront them while working together in the stunt and tumbling activities. Ideally,

this understanding will come not from authoritative directions from the instructor, but from student participation in the government of their own group. Some typical situations which need understanding of all the members of the class '8.ndthe instructor are:

1. Organization of the class: What organization shall be used for the class? If squads or teams are used, where does each individual belong? Where is each squad's place in the room? A certain amount of habitual procedures is desirable, because, in their small requirement for new adjustment, they free the individual for more essential purposes of the class.

- ~. Response to speaker: What signal shall be used to stop all activity when it is necessary for announcements, directions, or discussions to be given by the instructor or classmates? What response shall be given this signal?

3. Relation to classmates: What responsibilities does each student have to make the class a happy and successful one?

4. Care of mats: How can the mats be kept in a desirable condition for use?

5. Safety rules: What are essential safety rules to observe in a tumbling group? For complete discussion see Chapter VI.

, The informal method places the participation of the students on a natural basis. After the activity has been presented, the student, as a member of a social unit, has the responsibility of using the mats at the proper time and leaving them at the appropriate moment out of consideration of other members of the group. When squads are used, no attempt is made to keep each squad working at the same tempo as the others for the sake of uniformity, but, on the other hand, each squad adjusts to the needs of its members. As a result, members of one squad may be able to participate twice in the Continuous Forward Roll in a given length of time, while members of another squad participate only once. There are definite times when presentation of new activities is given the group, teaching points are emphasized, analysis of mistakes made, discussions held, or future plans made, and, at such times, the class is one large unit, listening and responding. The instructor acts as the

coordinator of the whole. Again, the attention of the instructor may be given to one squad or one individual as a means of assisting them to meet their problems, during which time the other individuals or squads proceed with their particular activities. Squad leaders often are used as assistants.

The natural relation of individuals working together is accepted in the socialized activity. When couple or group activities are performed, is it not natural and desirable that the individuals have a discussion about their work? An understanding instructor plans to allow time for such. Yet, how often is the instance seen of the instructor blowing a whistle or in some way "calling the class to order" immediately after the activity is performed. If the stunt has been unusual or difficult, the students should be given an opportunity to solve their problems; if it has been fun to do, to express their happiness. The sharing of experiences is a fine opportunity for self-expression. Sometimes this may be informal with the couples or groups. There is a place, also, for the individual or squad to share their experiences with the whole group. Unusual performance, good quality of performance, original work by the individual or group, discovery of something interesting in the activity, perhaps not experienced by all, are examples of contributions worthwhile to share with the group.

Self-expression as a means of developing the individual is valued in the informal method. It, sometimes, is difficult for inexperienced instructors to know just where to draw the line between individual freedom and group rights. If the fundamental principle is observed that self-expression is permitted up to the point where it does not interfere with the welfare of the social group, the standard is set and procedures are outlined more clearly.

The instructor can evaluate the success of the method used in the stunt and tumbling class by the following criteria. These criteria show, also, significant elements of the informal method.

1. There is whole-hearted participation by the students in the activities.

~. The students do not experience a feeling of being thwarted, as their energies and desires are guided for outlet in right channels.

3. There is a feeling of security by the student in respect to his relation to the instructor and classmates.

4. The relationship of the student with the instructor is marked by an ease which is a result of a feeling of friendliness and respect, a combination which bars undesirable familiarity.

5. The student is adjusted to his group, instructor, and activity, resulting in freedom from friction, zest for the situations at hand, and happiness from his participation in the activities and contact with the social group.

6. The satisfaction of the student comes from an objective interest in the activity rather than from a reaction to the instructor's personality.

7. The presence of good morale in the class is felt and expressed by a spirit of good will, cooperation, and desire to achieve in the activities.

8. The student has a group consciousness as shown by his consideration of his classmates and his willingness to abide by that which insures the welfare of the group.

9. There is an emotional stableness in the class in contrast to hilarious reactions and nervous tension.

10. The result of the participation of the students in the class is definite accomplishment in motor skills, mental activity, character values, and social attributes.

III. THE PROBLEM SOLVING METHOD

As students engage in the stunt and tumbling class, it is desirable and worthwhile, not only for them to be active in a motor way, but also to participate in the mental phase of the activity. To provide for this, it is necessary for the instructor to set up situations, the meeting of which requires mental activity on the part of the student. The mental procedure used by the student to meet the situation intelligently is important. If the situation is a problematic one which confronts the individual, an appropriate procedure which can be used is the problem solving method

The problem solving method commonly is considered as composed of five steps as follows:

1. Recognition of the problem as expressed in the form of a statement or a question,
2. Collection of facts to solve the problem.
3. Evaluation of the facts.
4. Drawing of conclusions.
5. Application of the conclusions to the situation at hand.

Such a method requires constructive thinking, evaluation, and deferred judgment.

An illustration of the use of the problem solving method in a stunt and tumbling class is given in the following instance. The students are working on the Headstand and the question arises as to what part of the head should be placed on the mat. This question may come from the instructor as a means of obtaining student action, or it may come from a student. As soon as it is felt that the students have a concise concept of the nature of the problem, steps are taken to seek a solution. The instructor acts as a guide in this phase, helping the students to use their present knowledge as a basis for tackling the problem, promoting suggestions from the group, offering reference material, and helping the students organize the data obtained. In attempting to solve the problem, the instructor may ask a question about the Forward Roll, a skill which previously has been achieved by the class:

"What is done with the head in the Forward Roll?" The answer brings out the fact that the head is tucked. This is followed by the question:

"What is the result of this action on the head?" The answer that it permits the body to roll leads to the next question:

"If it is desired that the body does not roll in the Headstand, how should the head be placed on the mat?"

Attempts are made to stand on the head, placing the top of the head on the mat, and, again, placing the region just above the forehead. Results are marked: Students in the class who have gained the skill to stand on their heads are observed,

or pictures of a Headstand may be examined to determine the position of the head on the mat.

Conclusions are drawn that in order to prevent rolling the front part of the head should be placed on the mat in the Headstand. The students apply the conclusions to their attempts for the Headstand.

Sometimes it may take several days to solve a problem in order that students may have time to gather data. For instance, with older students the problem may confront the group as to the method to use in lifting the legs in the Headstand from the Tip-Up position. The question arises why it is easier to extend the body if the knees are kept close to the body as the legs are lifted, and, again, why it is more difficult if the legs are extended in a horizontal position and then lifted. Students will find it necessary to seek the solution of this problem in physics.

Problems presented to the class should be within the range of the student's ability to solve. It is necessary that allowances be made for individual differences in mental ability to contribute to the solution of the problem.

Some problems in stunts and tumbling may be solved best by group action; some are more appropriate for individual solution. Valuable outcomes may be realized in both types of effort to solve problems.

Following are some typical examples of problems which may come before a class, the solution of which offers opportunity for student participation:

1. Technical Problems:

- a. What is the best relation of the head to the hands in the Headstand?
- b. What is the best distribution of weight of a person kneeling on the back of another kneeling person?
- c. What is the most efficient method of lifting a person?
- d. How can the center of gravity be lowered in the body?
- e. How can the balance be maintained in a Handstand?

~. Related Problems:

- a. What are the best traffic regulations for participation in specific activities?

- b.* What safety regulations are desirable in the class?
- c.* What is the desirable management of the class?
- d.* What is the proper care of the mats?
- e.* What is the proper care of the body in tumbling?

IV. UNITS OF WORK IN STUNTS AND TUMBLING

The activities of a stunt and tumbling class may be co-ordinated for a specific purpose, thus forming a unit of work. The organization of the activities into units is valued because of the greater opportunities offered for student participation, initiative, and leadership, and for the direction of the work toward a definite purpose, often resulting in greater student accomplishment.

The student participation in the unit is not only physical but mental, for, as the unit is undertaken, many problems are met which require solution in order to accomplish the desired goal. The problem solving method is a valuable technique which can be used in the development of the unit.

Because of its content, the unit usually extends over a period of time. It is customary to interrupt the regular class work in order to devote all activity to the undertaking. When the unit is completed, it is an easy matter to swing back to the usual class procedure.

Most units call for group action, but individual work, also, may be necessary. Usually a group is put in charge of a specific phase of the unit, and the results of each group's efforts are coordinated with the others' to accomplish the purpose. Ideally, the students should be permitted to select the part they wish to work with in the unit. The unit offers a splendid opportunity for social adjustment of the students if effort is made to organize the groups in a way which will promote the proper development of each individual. The basic organization of the class is shifted to permit the necessary regrouping. This usually results in wider social contacts. !

As in the problem solving method, the instructor acts as a guide, coordinator, and organizer of the group during the development of the unit. Under wise leadership, the students will

turn to the instructor for information or suggestions when desired, but will not feel that the ideas of the instructor are imposed upon them. They will be inspired by their contact with the instructor, resulting in a desire to express themselves and contribute to the fullest.

The following list shows possibilities for units for the stunt and tumbling group:

1. Tumbling demonstration.
2. Origination of new activities.
3. Origination of pyramids or groupings.
4. Tumbling act for circus clowns.
5. Stunt and tumbling meet.

CHAPTER IV

ORGANIZATION FOR STUNT AND TUMBLING CLASSES

ORGANIZATION for stunt and tumbling classes consists of three phases: (1) organization of students for tumbling activities; (2) placement of students and tumbling equipment in the room space; (3) organization of student activity.

In order to realize results in the teaching of stunts and tumbling, it is necessary for the instructor to consider the question of organization. Organization often is an influencing factor in the accomplishment of the desired outcomes. The type and the amount of organization can be aids or handicaps in reaching these ends. Organization is justified only to the degree that it facilitates better teaching on the part of the instructor and more efficient learning on the part of the students. It is never justified as an end in itself, a feat or skill on the part of the instructor to make the tumbling class machine-like.

The type of organization should be flexible to meet the demands of the purpose' at hand. If this principle is upheld it eliminates the "hobby" organization, the one pet type which is used for all occasions regardless of the purpose. The choice of the type and the amount of organization depends upon: (1) the aims sought; (2) the number of students; (3) the age of the students; (4) the amount of equipment; (5) the available space for activity; (6) the type of program.

Following are criteria by which to judge the appropriateness of the organization selected:

1. Does it aid in carrying out the objectives, social as well as physical?

- ~. Does it permit a desirable amount of activity per student?

3. Does it allow efficient use of the equipment?

4. Does it make efficient use of the room space?
5. Is it time saving rather than time consuming?
6. Does it provide safety for the students?
7. Does it free the students for desirable active participation rather than inhibit them?
8. Does it free the instructor to devote time to teaching points rather than demand continual attention to the arrangement of students?
9. Does it permit proper distribution of teaching efforts on the part of the instructor?
10. Is it within the student's ability to grasp and make function?
11. Does it permit the students to hear instructions and see the instructor, demonstrations, and student activities?
12. Does it eliminate as much as possible the waiting of turns?

TYPES OF ORGANIZATION

1. ORGANIZATION OF STUDENTS

For the practice of tumbling activities, participation in tumbling games, tumbling contests, and tumbling units, the tumbling class may be organized on the following bases:

1. The individual student as the smallest unit.
2. Extemporaneous groupings.
3. Squads, or divisions, as they sometimes are called.
4. Teams for competitions.
5. Whole class as a unit.

Each of these is discussed in turn.

1. If the class is organized so that the individual is the smallest unit, each student is doing individual work. This type is usable for practice periods and for small classes.

2. Sometimes the nature of the lesson lends itself well to an extemporaneous organization of students, the grouping of which depends upon the occasion. It is important at times to give students opportunity to form their own groups or to choose their own partners.

3. When the students are to be organized into units, such as squads or teams, it is necessary to consider the method of

selecting the, personnel for them. The basis commonly used in the physical education field for the selection of squad members is one, or a combination of several, of the following items:

Height
Weight
Age
Ability

Due to the character of tumbling activities it is more advantageous to have a variety of height and weight in a squad than uniformity in these items. Age alone seldom is used as a basis. Ability serves as an efficient basis for the selection of squad membership. When it is used, height and weight also should be considered to the extent of the best distribution of them within the limits of ability.

One other item, unfortunately not often found in the above list because it is not a usual basis, but which should be considered, is the social needs of the students. When squads are being organized, advantage should be taken of the splendid opportunities for the valuable social contacts which tumbling offers. So many of the activities call for the sharing of experiences, adjustment to others, and cooperation on the part of students. An alert instructor will know the social needs of students and will attempt within possible limits to let those needs serve as a guide in the grouping of students for squads.

Organization of students by ability may be of two types:

1. Heterogeneous, or mixed, grouping.
- ~. Homogeneous grouping.

Heterogeneous grouping is the type of organization of students in which a range of ability is present in each squad. The advantage of the heterogeneous grouping is the assurance of the presence of motor ability in each squad, which serves to promote accomplishment. Contact with a better performer in a group usually acts as an incentive for the less efficient student to put forth best efforts to reach that desired level of performance. Again, a better performer in a group serves as a

model for the others by which to judge the results of their efforts.

The disadvantage of the heterogeneous grouping is that it is not possible always for the instructor to take care of specific needs of individuals in each squad. Often students of greater skill accomplish an activity quickly and are ready for a new activity, but, because of slower progress of other members of the squad, it is not advisable to present it to them. Again, since students of like ability are scattered in several squads, the instructor may have to repeat teaching points more often than if these same students were grouped together in one squad.

Homogeneous grouping is the type of organization of students in which students of like ability are grouped together in one or more squads. If a stunt and tumbling class is organized in this manner there may be one or more squads of unskilled ability, one or more of medium ability, and one or more of skilled ability. This system sometimes is called skilled divisions.

One advantage of the homogeneous grouping is that students of like ability are grouped together, and activities can be presented to them which are within their capacity to perform. Another advantage lies in the fact that the ranking of the squads on the basis of skill serves as an incentive on the part of the students to work toward the goal of being eligible for the most skilled squad.

A disadvantage of this type of organization is that it does not permit students of less ability to come in contact with those of greater skill. Thus, association with classmates possessing skill, with its possible influence for improvement, is lacking. Another disadvantage, which may occur if not guarded against, is the psychological feeling of inferiority on the part of the unskilled students who are placed in the lower divisions. This must be offset by the instructor placing the goal of improvement always before the students. The desirable attitude to be obtained in a class toward such an organization is that it offers the best opportunity to solve problems of performance, and to realize success in tumbling. Again, it is essential to set the standard that each student in the class competes against himself,

number of squads is, if there is an even number of students in each squad, the distribution of numerical ranks will total the same for each group. If there is an uneven number of students in each squad, the squads will not be equated perfectly. Likewise, if the total number of students is uneven, there will not be perfect equation. However, though the equation may not be exactly the same for each squad, it serves sufficiently for ordinary purposes.

Homogeneous grouping is applicable to a tumbling class in the following situations:

If the students have had no previous tumbling experience and the heterogeneous organization is used, there comes a time when a division of ability distinctly appears. Certain students will have accomplished the presented activities and will be ready for others, while some will be meeting definite problems in the attempted performances. When this stage is reached it is advisable to organize the homogeneous squads for the sake of further progress for all students concerned.

If there is an initial division in the class due to previous experience and ability, homogeneous groupings are advocated. It is not justifiable to necessitate the advanced students covering the ground of the beginner for the sake of keeping uniformity in the class. During the year as the beginners make normal progress, there should be less and less gap between the homogeneous groups. The instructor will find that the material offered the class becomes more unified.

To organize homogeneous groupings calls for a knowledge on the instructor's part of the student's ability. If this knowledge is not at hand, it is necessary to use a classification test. The items of this test should be stunt and tumbling activities. When results of the test have been obtained, the students may be placed into skilled divisions, or squads, as beginners, intermediates, and advanced tumblers. Each group participates in, and practices, a different range of activities. When such an organization is used, the students may be interested in giving each division a name appropriate to tumbling. Within each division the students may be given a definite number of required

tumbling activities to accomplish before being advanced as a member of the next higher squad. For complete details of such an organization, see Chart III.

CHART III

Achievement Chart for Skilled Divisions

	BEGINNERS										INTERMEDIATES										ADVANCED									
	Snail Stunt	Shoulder Rest	Roll - Poly	Forward Roll From Stand	Forward Roll From Run	Backward Roll	Continuous Forward Roll	Continuous Backward Roll	Tip Up	Forward Roll Without Hands	Headstand	Swan Balance	Sitting Balance	Double Forward Roll	Double Backward Roll	Hand Spring over Back	Dive Over 2 Bodies	Cartwheel	Continuous Cartwheel	Dive Over 4 Bodies	Hand Stand	Hand Spring	Knee Flip	Hand Stand On Knees	Head Spring	Snap Up	Walking on Hands			
Adams, Imogene	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Bass, Katherine	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Carter, Marjorie	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Evans, Marie	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Hull, Verma	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Long, Ruth	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Nash, Mary	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Phillips, Lois	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Recherford, Ruth	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Williams, Rich	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Clark, Lucille	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Fisher, Mildred	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Hardison, Thelma	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Jones, Ellen	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Lang, Melba	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Muller, Fanny	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Phelps, Maudie	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Winston, May	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Boswell, Dora	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Campbell, Doris	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Hamilton, Janet	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Knight, Ann	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Speer, Pauline	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Watkins, Doris	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			

4. Sometimes it is desirable to organize students into teams for competition in tumbling. Equated squads may serve as well-balanced teams. Again, it may be advisable to give the students experience in selecting captains and choosing the personnel of teams on the basis of definite criteria of efficiency and qualifications of leadership which are drawn up by the students.

5. Some tumbling activities give opportunity for the class as a whole to act as a unit. Pyramids and games serve well for this type of organization. If the class is not too large, it is an advantage to use this type of organization, for a desirable feeling of unity results.

II. FORMATION OF STUDENTS AND EQUIPMENT ON THE FLOOR SPACE

Every instructor wishes to get the maximum use of the available tumbling equipment and of the available room space, and so desires to group the students about the activity in the most efficient way. Following are suggested formations of students and equipment. The key below interprets the symbols used.



Space for participation in activity. This may be a mat, or simply floor space.



Student.

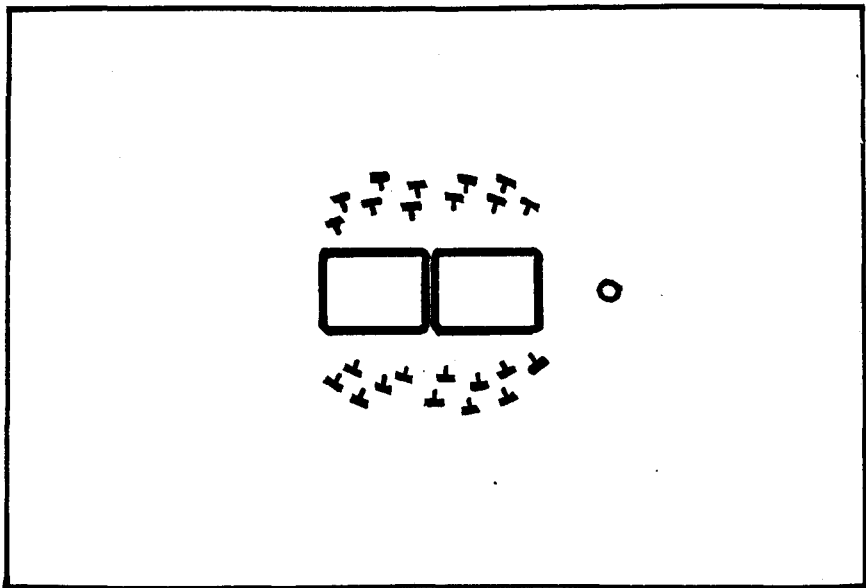


Perpendicular line attached to the student symbol points toward the direction in which the student is facing. For instance, this student is facing the bottom of the page.

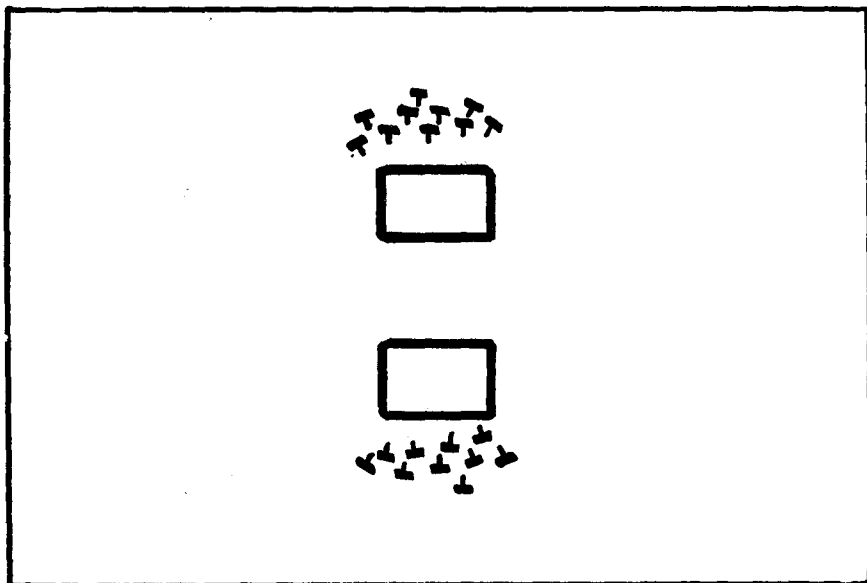


Instructor.

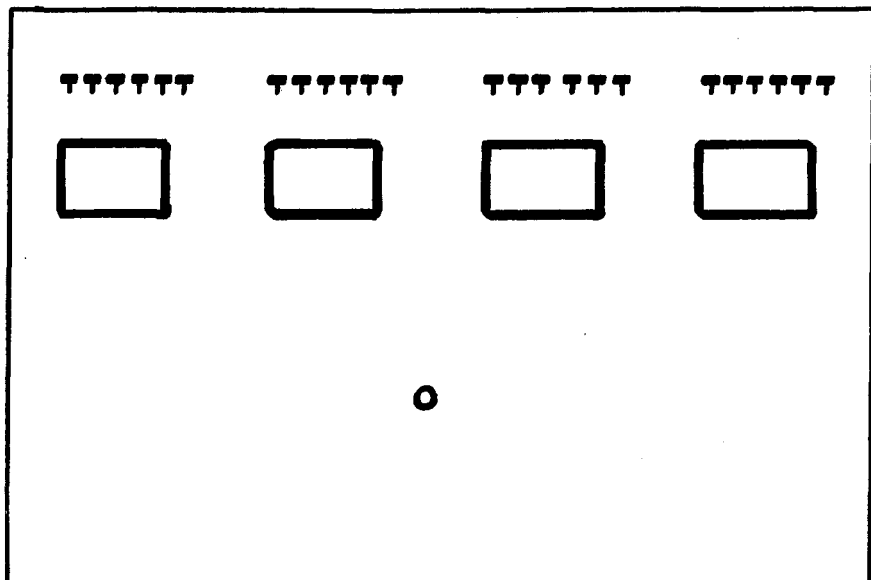
1. Informal Grouping Around One Activity



This represents an organization which is adaptable for younger children or for a very small class. The students are seated informally about the activity. The instructor is stationed at one end in view of the students. The activity is presented by the instructor, after which volunteers, at first, may be called upon to perform it. Each student, then, has a turn.

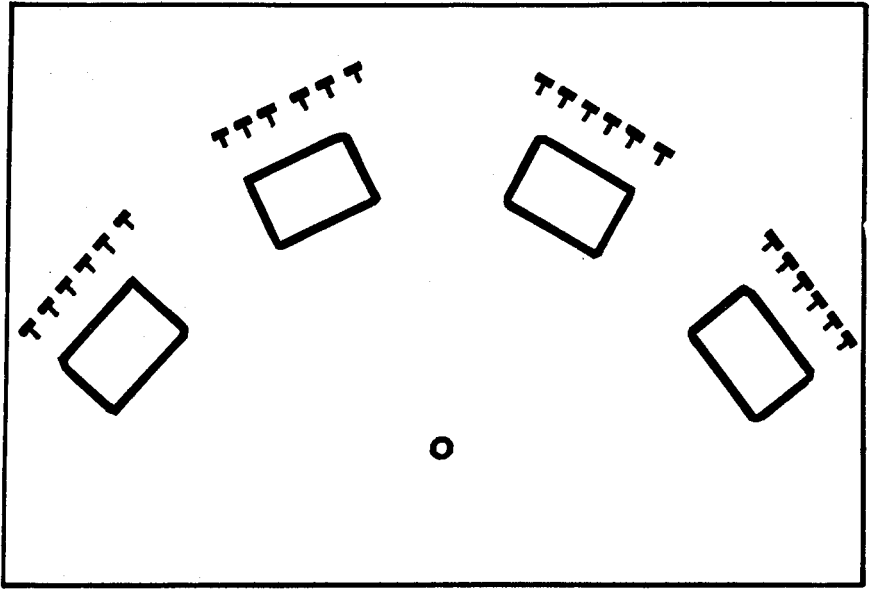
2. Informal Grouping Around Two Activities

This organization is on the same order as *No. I*, except the students are divided into two groups. After the activity is presented, individuals from each group participate at the same time.

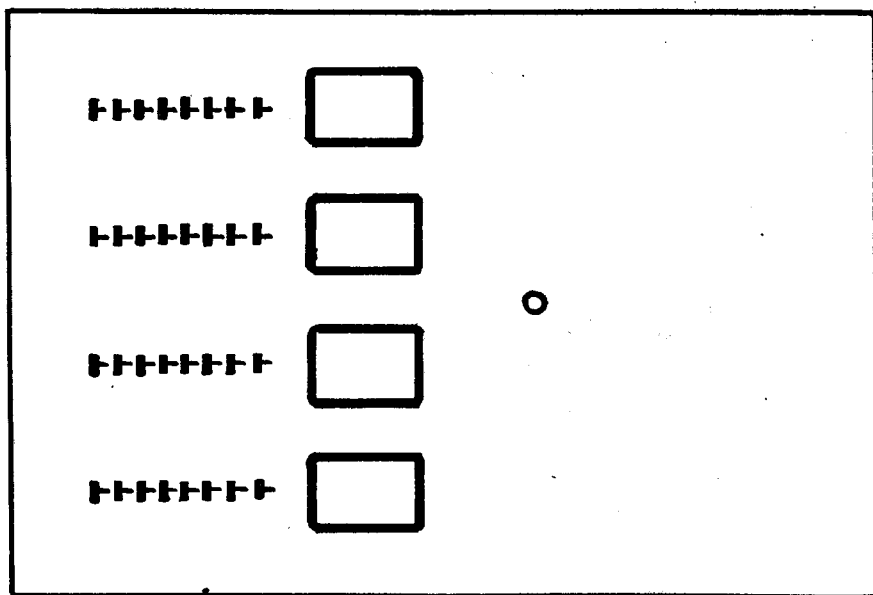
3. Line Formation

A certain number of students is lined up at the side of each mat, at a distance of at least four feet from the mat. The students are under the supervision of the instructor or squad leaders. An advantageous position for the instructor to take for the presentation of the activity is well out in front of the whole group. After the presentation students from each squad take turns practicing the activity.

The advantage of this organization is that all the students are in view of the activity and the instructor.

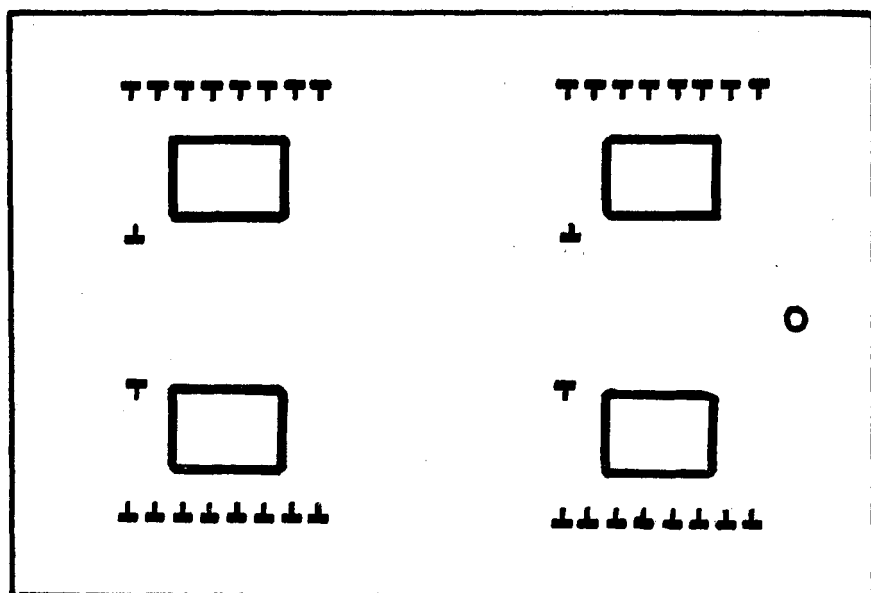
4. Semicircle Formation

This is the same system as in No. 3 except a semicircle is formed. Certain room spaces lend themselves to this formation better than No.3. The instructor can see all the students, who, in turn, have a view of the activity at every mat.

5. File Formation Behind Mats

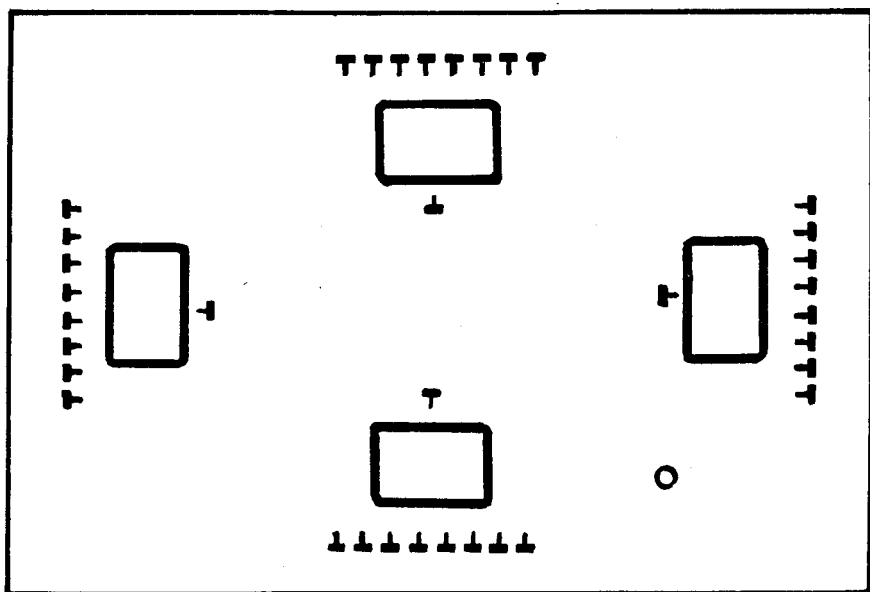
The students are organized in a file formation behind the mats. They may either sit or stand. The instructor stands in front of the files to present the activity. The first students in the files attempt the activity, after which they may go (1) back to their original positions; or (2) to the foot of the file, all other members of each file advancing forward one place; or (3) to the opposite end of the mats, in which case other members of each file, in turn, take their places behind them.

This organization is justified only if the room space is such as makes it necessary. Its outstanding disadvantage is that all students do not get a clear view of the activity, when they are lined up behind the others. Whenever possible, the line formation in which students are stationed side by side in view of the activity should be used in preference to this one.

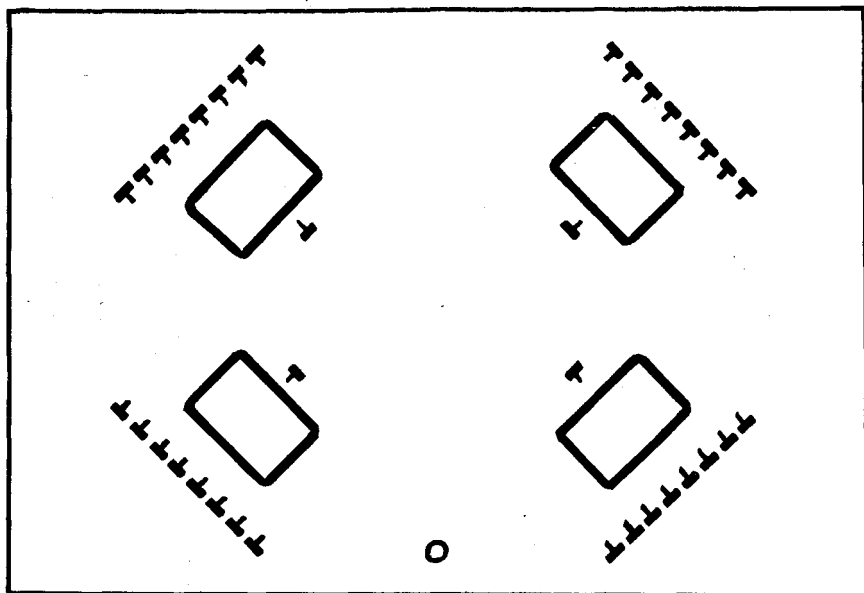
6. *Four Line Formation*

The mats are placed on two sides of the room with a space between each. Students are lined up on the outer side of the mats. The best position for the instructor when giving instruction is at the end of the space. After the presentation of an activity, members from each squad practice it in their respective places.

7. Square Formation

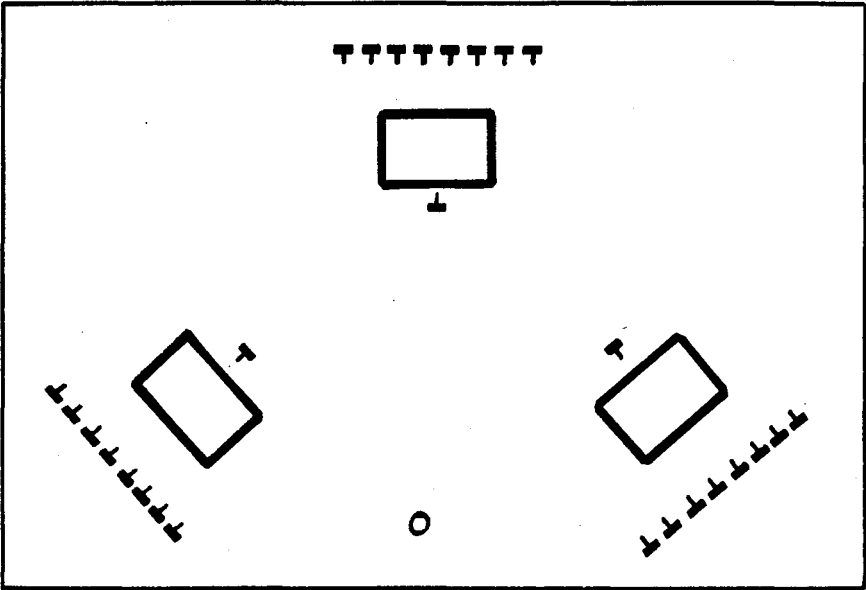


The students are organized in line formation on each side of a square. They may be in charge of either squad leaders or the instructor. The most advantageous position for the instructor to take when speaking to the class is at one corner of the square. The advantage of this formation is that all students can see every performance in the room.

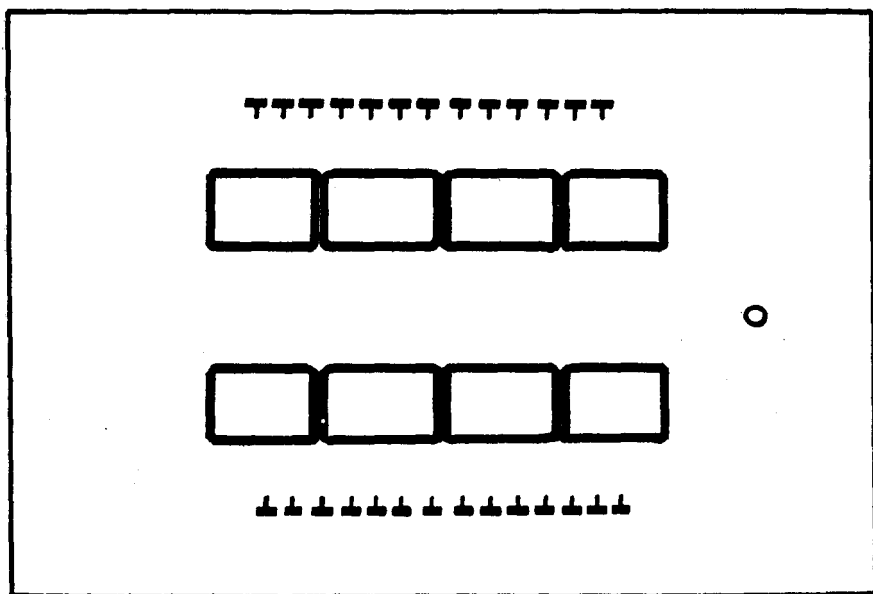
8. Corners of a Square Formation

This formation is a variation of No.7, with the students lined up for activity at the corners of the square.

9. *Triangular Formation*

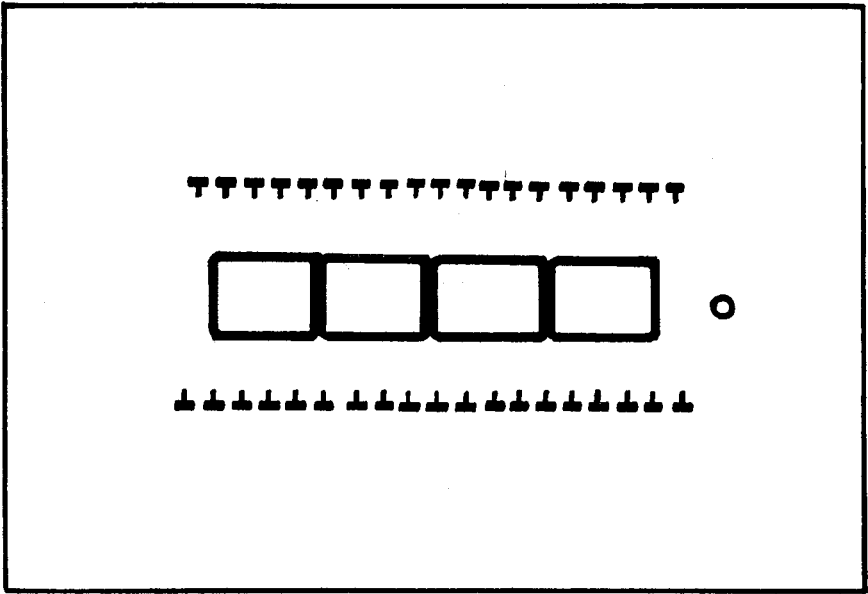


No. 9 shows the possibility of organizing students and equipment when three groups are desired.

10. Two Line Formation

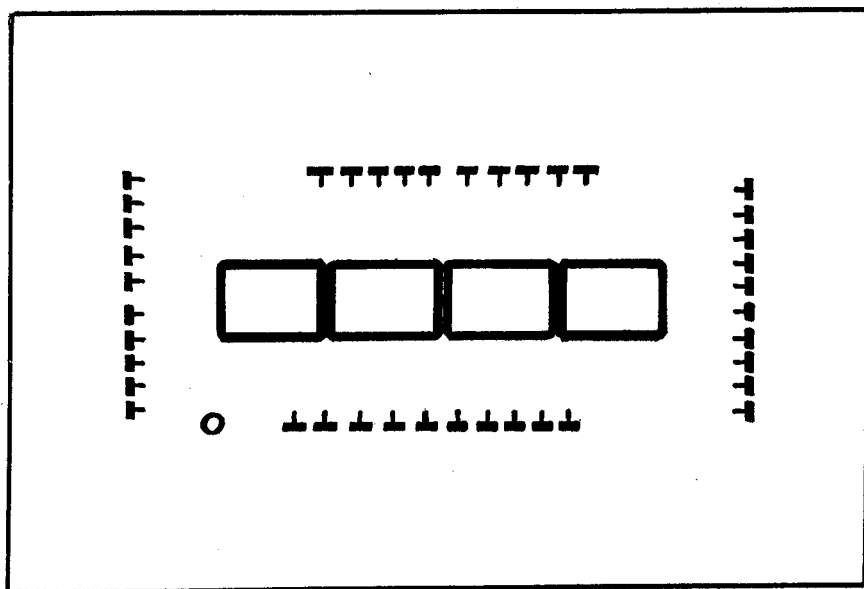
The mats are placed in two long rows and half of the class lines up at the outer side of one set, and the other half in like fashion at the opposite set. The instructor, standing at one end of the group, presents an activity, and students from each line take turns on their respective mats. This organization is efficient for such activities as Team Rolls, Couple Rolls, Continuous Rolls, Team Balances, contests, and pyramids. Students from each line may see clearly the activities on both rows of mats.

11. Two Squads and One Row of Mats



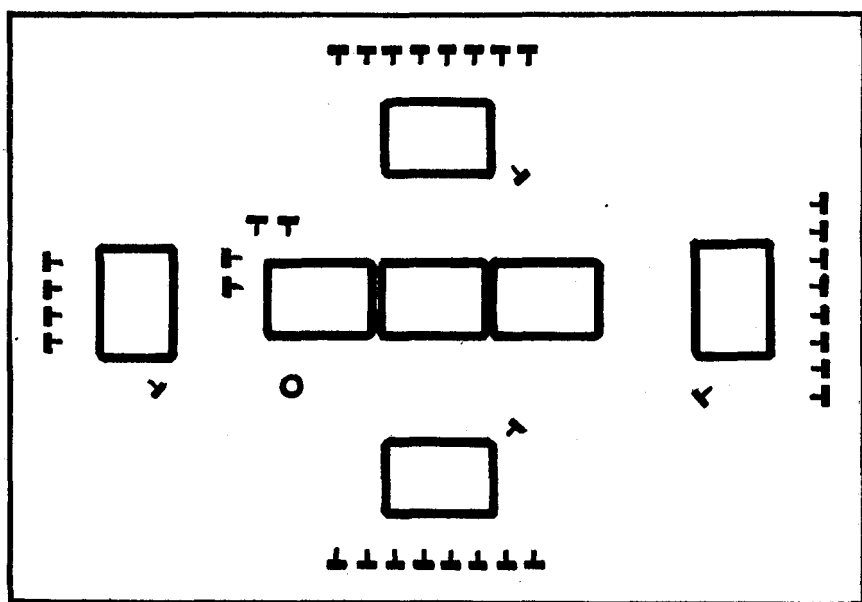
This arrangement is similar to No. 10, except there is just one row of mats. It works well for the same type of activities as stated in No. 10, and may be necessary when the supply of mats is limited.

1'2. Four Squads and One Row of Mats

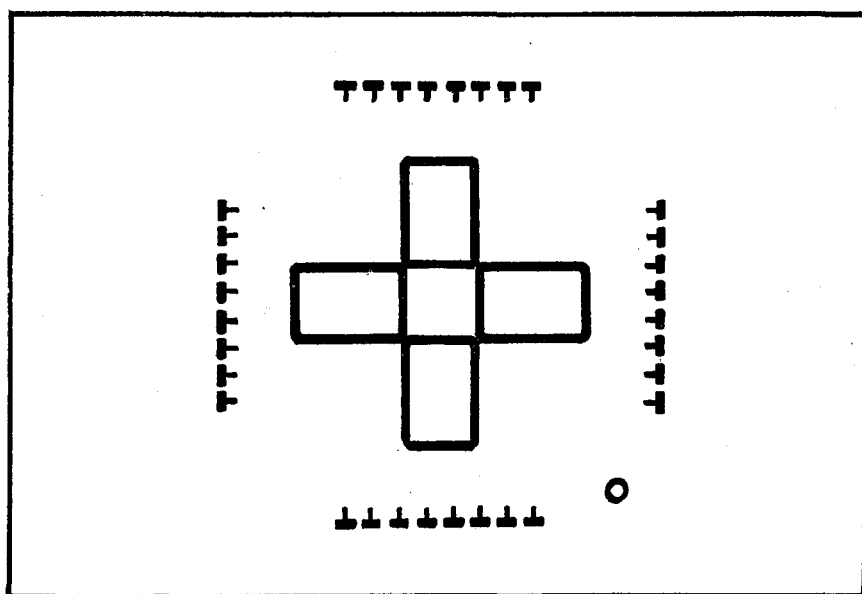


This arrangement can be used well for contests. The teams are seated in a square formation around the mats.

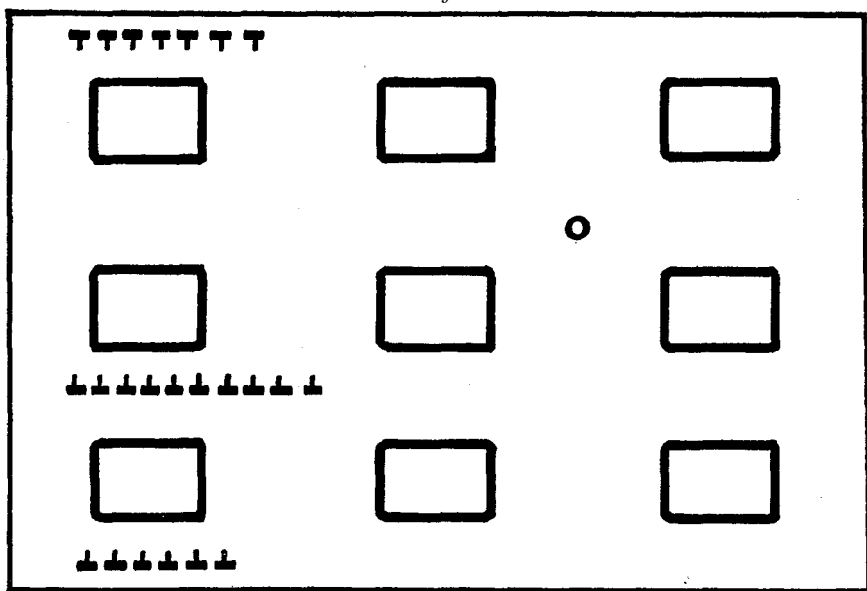
13. Combination of Square and Line Formation



In this arrangement each squad has a specific program at the respective mats or spaces..Also, each squad has a certain allotted time on the long mat. Such an arrangement adapts itself well to a lesson in which the instructor is teaching Double Rolls, animal walks, and Continuous Rolls. It is possible to call one squad at a time to the long mats, during which time the remaining squads practice other activities. In this way, long waiting of turns is eliminated.

14. Mats Placed in a Cross Formation

In this formation the mats can be used crosswise or lengthwise. Balance stunts on each mat are feasible for this arrangement. Four individuals, one from each squad, may do Forward Rolls across the mats and advance around to each mat, returning finally to their respective squads. This formation lends itself well to the progressive type of organization. See pages 107, 108, 109.

15. Lanes of Activities

This formation is planned for skilled divisions. See page 88. Each squad has its own lane, and each member of the squad advances from one activity to another within the lane.

III. ORGANIZATION OF STUDENT ACTIVITY

In this section consideration is given to various ways of organizing student activity. The criteria for selection of such are: (1) the organization should permit the maximum amount of participation on the part of each student; (2) it should eliminate as much as possible waiting for turns; (3) it should promote the maximum amount of learning on the part of the students.

The subject is discussed from the viewpoint, first, of heterogeneous squads, and, second, of skilled divisions. As each type is discussed, the possible formations of students and equipment on the floor are suggested by referring to the numbers given them in the previous section.

A. HETEROGENEOUS SQUADS

1. Non-progressing Type, Instructor Presenting Activity.

Possible formations on the floor: Nos. 3,4,5,6,7,8,9, 10, 11.
Squad leaders as assistants.

In this type of organization, the instructor is in full charge of the lesson. The activity is presented by the instructor, after which the students in each squad are given opportunity to practice it under the direction of squad leaders. The instructor may progress from squad to squad giving suggestions, and may at any time get the attention of the whole class in order to give teaching points. After a certain number of minutes of practice, the instructor again presents a new activity. At least four or five activities may be presented and practiced during one class period under this system.

The value of this type is that the students get the advantage of the instructor's teaching, after which the squad organization gives opportunity for directed participation on the part of all students.

12. Non-progressing Type, Squad Leaders Presenting Activity.

Possible formations on floor: Nos. 3, 4, 5, 6, 7, 8, 9, 10.
Squad leaders instructing.

This organization requires well-trained squad leaders, who have had previous instruction in teaching the activities in the lesson. The squad leaders present an activity to their squads, -after which they direct the participation of the students in the practice of it. After a certain number of minutes, upon signal of the instructor, they present another activity. Thus, the students are given four or five activities in a class period. The instructor is free to give individual attention to those who need it.

The squad leaders are trained that, in case their group learns a stunt more quickly than another group, they direct the squad in a review of another stunt previously learned.

An instructor may find that a uniform time for all squads to begin work on another activity is not necessary. If this is the case, the discretion is left to the individual squad leaders

as to when to present another activity. Whether this system can be used successfully or not, depends entirely upon the ability of the squad leaders to assume that responsibility.

3. *Squads Progressing.*

Possible formations: Nos. 3,4, 5, 6, 7, 8, 9.

Squad leaders instructing.

In this type of organization each squad leader has been given previous training and instruction for teaching a specific activity, different from the ones given the other squad leaders.

To begin with, the squad leaders are given a certain amount of time in which to present a stunt to their own squad members and direct the practice of it. At a signal from the instructor, the squads then rotate as directed to another mat or section. The squad leaders remain at their original places and proceed to teach the new squad their activity. The squads, thus, proceed to rotate after each stunt is prescribed, until they are in their original places. If there are four squads, each student during a period has opportunity to learn four activities. Each squad leader is given responsibility of teaching only one stunt, rather than four stunts.

For this type of lesson, activities should be chosen carefully. The ones selected should vary in nature. Thus, one might require agility, another balance, another flexibility, and another strength. Each activity should require about the same length of time as the others for presentation and practice.

The instructor is free to move from one squad to another, giving suggestions if desirable, or individual instructions to a student if needed.

4. *Squad Leaders Progressing.*

Possible formations: Nos. 3,4,5,6,7,8,9.

The arrangement for this plan is the same as in 3. The squad leaders are prepared to teach specific stunts, and they teach their own squad first.

Upon signal from the instructor, the squad leaders rotate to a new squad. This system is advantageous in a crowded room,

or if it is necessary to save time in the rotation. The squad leaders can rotate much faster than all the squad members. However, the system is not good if the squad leaders have to carry equipment with them from one squad to another. To offset this disadvantage, stunts should be chosen which do not require equipment, or, if available, the necessary equipment should be distributed to each squad before class so that it is at hand when needed.

5. *Individuals from Squads Progressing.*

Possible formations on the floor: Nos. 3, 4, 5, 6, 7, 8, 9.

Squad leaders assisting.

This organization is advocated for a review of activities or for practice of activities previously presented.

The class is organized in squad formation with squad leaders in charge. The activity to be performed in turn at each mat or section is announced to the class, and necessary instructions are given before participation begins.

One member from each squad attempts the activity assigned for the specific mat before which the squad stands. Upon successful performance, the individual advances to the next squad in rotation. If the attempt is unsuccessful, two trials are allowed before rotating. Each squad member performs and advances to another activity. All members finally end in their original places.

B. HOMOGENEOUS SQUADS-SKILLED DIVISIONS

1. *Non-progressing Type.*

Possible formations on floor: Nos. 3, 4, 5, 6, 7, 8, 9.

Squad leaders instructing.

The squad leader for each squad is given previous training and instruction for the teaching of the activities planned for the specific squad. Thus, each squad is working on a different set of activities according to the ability of the members.

The squad leaders present an activity to their members, then provide opportunity for the practice of the activity by

the members. Four or five activities are taught in one lesson to each squad.

12. Instructor Progressing.

Possible formations on floor: Nos. 3, 4, '5, 6, 7, 8, 9.

Squad leaders as assistants.

The instructor takes charge of one division and presents an activity. The other squads are in charge of squad leaders who give the squad members a review of stunts. After a certain amount of time, the instructor progresses to the next division. It may be possible to instruct all squads during a class period, or it may be necessary to take several days for all of them.

3. Individuals from Squads Progressing.

Possible formation on floor: No. 15.

Squad leaders assisting instructor.

This type of organization is good for a review. Each squad is given a certain lane down the floor. The instructor, or squad leaders, announce the activities to be performed within each lane. The first members of each squad attempt the activity announced for the specific squad. Upon successful performance, the individual advances to the next activity within the lane. Each member of the squad advances in this way from one activity to another within the lane. If the attempt to perform the activity is unsuccessful, two trials are allowed before advancing to the next activity. The squad finishes with its members lined up near the last activity.

C. MISCELLANEOUS ORGANIZATION

1. Improvement Day.

Places are designated on the floor for certain activities. Students choose the activity they wish to practice, and go to the proper place. After a certain number of minutes they advance to another activity. When this system is used the instructor must be ready to adjust to situations. If there is an overflow at one activity, more facilities may be needed. This is a good organization for practice, giving choice to students. The activities chosen should be guided by the needs of the class.

e. Follow the Leaders.

A certain number of leaders is chosen. Each announces what activities he desires to practice. The other students choose in which leader's activity they desire to engage and line up accordingly with that leader. After a certain number of minutes of practice, new leaders announce new stunts and the groups are reorganized. The instructor must be ready to adjust to situations.

In summary, the following suggestions concerning organization are given:

1. Be sure that the students have a clear understanding of the organization.

2. For younger children, make the organization simple and definite.

3. For younger children, do not change the type of organization to the extent that it requires an undue amount of adjustment on their part.

4. For older children, change the organization more often. The advantage of this lies in the more varied social contacts made by the students.

5. Plan the organization carefully. Students appreciate efficiency on the part of the instructor to organize them to the extent that there is equality in opportunity to participate in the activities, to receive teaching suggestions, and to obtain desired satisfaction in the performance of the activities.

6. Be efficient in getting the organization in working order. A little time devoted at first in explaining it and getting it under way is time well spent.

7. Anticipate students' needs and prepare to meet those by proper organization as the lesson is planned. If this detail is left to the time when the class is before the instructor, the results usually are confusion, loss of valuable time, and lack of accomplishment.

8. If the type of organization selected does not work, be frank about it and remedy the defects.

9. Give the students opportunity to help plan the organization sometimes. It is valuable experience for them.

10. Attempt to have plenty of room for the performance of the activity.

11. Station the students who are not participating in the activity at a 'sufficient distance from the performance to guarantee a feeling of freedom and safety by the participant.

1~. It is not necessary always for the students who are waiting for turns to stand. Permit them to sit on the floor.

13. Establish well functioning traffic regulations. Student participation in one squad must not interfere with that in another squad. For instance, a student, after completing an activity and in the act of returning to the group, must not obstruct a performer in another squad. Likewise, a student in one squad must not interfere with another member in the same squad. See Safety Regulations, page 13~.

14. When possible, station the students side by side rather than in file formation, one behind the other.

15. If just a few mats are available, the foundation of the course should be stunts which do not require the use of mats. After a background is gained, one squad at a time can work on the mats while other squads are working with stunts.

16. From six to ten students make a desirable number for a squad.

SQUAD _LEADERS

The development of leadership is one objective in the tumbling class. If it is realized, opportunities must be offered for active participation on the students' part in situations which call for leadership. In each tumbling class students usually present a range of ability for leadership, as well as a range of ability for performance in tumbling activities: Therefore, the leadership situations must be graduated in character for individuals so that each progressively may develop. It is possible to range these from responsibility of mechanical details to the leadership of classmates and teaching of tumbling activities. The grade range for the development of leadership is from the elementary school through college.

Following are possible leadership situations:

1. *Mechanical Details:*

- a. Care of tumbling equipment, distribution and collection of equipment required for stunts.
- b. Care of ventilation of room.
- c. Care of lighting of room.

The above responsibilities should be rotated from student to student so that each may experience them.

2. *Responsibility of Small Group of Classmates, Such as a Squad, in Regard to:*

- a. Roll call.
- b. Traffic and safety regulations.
- c. Participation in activities.
- d. Discipline (minor).

These responsibilities should be given to students whose training and experience in leadership have equipped them for such tasks.

3. *Teaching of Tumbling Activities.*

Though this is placed as a high type of leadership, it can be graduated in character. It is possible for an elementary school child to present an activity and demonstrate it, after which the classmates attempt the performance by imitation. It may be surprising to find how well this little teacher can answer the question of the students, "How did you do it?"

This opportunity to teach a stunt may be given by regular rotation or in such programs as Favorite Stunt Day, or Original Stunt Day.

On the other hand, the teaching of tumbling activities to older students requires careful preparation, if best results are obtained. If an instructor has a squad leadership system which involves assistant teaching, it is essential that time outside of class be given to the training of the squad leaders in their duties.

Definite standards should be set up, and strictly adhered to, for the efficiency of the squad leaders. It is most important

that it is clearly understood that the opportunity for squad leadership is open to all, rather than just a favored few; that the selection of squad leaders is based on ability and necessary qualifications for the responsibilities, rather than upon personal reasons; that one important qualification is that squad leaders must be good followers as well as good leaders; and that accepting squad leadership positions involves giving service to others, rather than receiving certain privileges,

CHAPTER V

THE USE OF STUNT AND TUMBLING MATERIAL

A. ORGANIZATION OF MATERIAL

THERE is ample amount of material for a tumbling class. In fact, nearly one thousand activities under the classification of stunts and tumbling are in published form today. It is most worthwhile for the instructor to be familiar with the sources of material and to know a large range of activities. Having a repertoire of tumbling activities, however, is not enough. The next essential is to know the appropriate use of the material. This necessitates an analysis, classification, and organization of activities for teaching purposes. The following types of organization prove useful in handling material:

I. ORGANIZATION ACCORDING TO DEMANDS MADE UPON THE INDIVIDUAL

Analysis of the elements involved in activities reveals the demands in regard to the use of the body which the activities make upon the individual for correct performance. These demands can be classified into four main types, one or more of which predominate from the individual's standpoint as requirements for the performance of each activity. They are:

---1. Agility. 2. Flexibility. 3. Balance. 4. Strength..

Agility implies dexterity and ease in the management of one's limbs. According to this definition, the activities which require agility for their performance include such fundamental movements as walking, running, jumping, springing, and kicking.

1. Walk: To progress without lifting one foot entirely before the other one touches the ground, or, in case of walking on the

hands, without lifting one hand entirely before the other one touches the ground.

2. Run: "To move rapidly by springing steps so that for an instant in each step, neither foot touches the ground." ¹

3. Jump: "To pass over or across by a spring or leap." ²

4. Spring: To leap, bound from the feet or hands. In tumbling, this sometimes results in revolving the body.

5. Kick: To thrust with one or both feet.

Chart IV, page 120, lists common stunt and tumbling activities which, because of the predominating elements involved in their performance, come under the above classification of • agility.

Flexibility implies ease in bending or adapting readily to change of shape. According to this definition, activities which require flexibility for their performance include such movements as twisting, folding, bending.

1. Twist: To wind, turn, contort.

2. Fold: To lay close to the body, double.

3. Bend: To curve, move out of a straight line.

Chart V, page 121, lists common activities whose predominating elements come under the above classification.

Balance infers keeping equilibrium. Theoretically, every activity requires balance, a maintenance of equilibrium. The discussion under this heading, however, will be devoted to those activities whose requirement of balance is predominating. Some activities require balance while the performer is stationary, and others while moving. Chart VI, page 122, lists common stunt and tumbling activities whose predominating element is balance.

Strength is the quality of having an inherent power or force to act or to bear. According to the above definition, activities which require strength as the predominating element for successful performance involve such fundamental movements as lifting, pushing, pulling, and supporting weight.

¹ From Webster's Collegiate Dictionary, Fourth Edition. Copyright, 1916, 1925, 1931. By G. and C. Merriam Co., Springfield, Mass.

² *Ibid.*, p. 544.

1. Lift: To cause to move higher, raise, or elevate.
- ~. Push: "To press against in order to impel." ¹
3. Pull: "To exert force on so as to cause, or tend to cause, motion toward the force." ²
4. Support weight: The act of bearing an outside weight.

Chart **VII**, page 123, lists familiar stunt and tumbling activities which come under this classification.

Most stunt and tumbling activities involve more than one element. Chart **VIII**, page 124, lists common stunt and tumbling activities and indicates the demands made upon the individual for the performance of each.

One advantage of analyzing an activity for its main requirements lies in the fact that the knowledge serves as a guide in the teaching of the activity. As seen by the charts, the activities involve fundamental movements. Instructors of tumbling should have thorough knowledge of the principles in the execution of these fundamental movements and apply them in the teaching of the tumbling activities in which they appear. Knowledge of such a classification serves, also, as a guide in the selection of the activities for the day's lesson for various age groups, for various body builds, and for the two sexes. The activities in the day's lesson should vary in type so as to develop agility, flexibility, balance, and strength in the individuals according to their needs.

II. ORGANIZATION ACCORDING TO TUMBLING TERMS

The instructor who is working strictly with tumbling activities may be interested in classifying them into the following types of activities:

1. Rolling.
- ~. Balancing.
3. Supporting the body weight inverted.
4. Springs.

¹ Webster's Collegiate Dictionary. *Op. cit.*, p. 784.

² *Ibid.*, p. 780.

III. ORGANIZATION ACCORDING TO NUMBER OF PERFORMERS

Again, stunt and tumbling activities may be classified according to the number of participants required for the execution of the activity as follows:

1. Individual activities.
- ~. Couple or companion activities.
3. Group activities.

IV. ORGANIZATION ACCORDING TO DIFFICULTY

It is most important that the instructor is able to organize material according to difficulty of performance. Presentation of activities in a graded series according to students' abilities and needs is essential to good teaching. Theoretically, the ranking of activities would vary for each individual according to body build, age, sex, and ability. As an instructor works with stunt and tumbling activities, an estimate of the degree of difficulty of various ones is gained. If a record is kept of the relative length of time it takes to learn to perform the activity and the number of students learning the stunt, an idea of the difficulty is gained.

On page 277, is a list of sixty individual stunt and tumbling activities and forty group activities, which have been ranked by ten judges according to difficulty for college girls. The final rank assigned each was obtained by averaging the decision of the ten judges. The criterion this group kept in mind in judging the activities was the difficulty for the average college girl. While this ranking was done for college students, the instructor may find it to be of service in teaching tumbling and stunts to high school girls.

B. SELECTION OF MATERIAL FOR LESSONS

A very important act in the instructor's planning for a tumbling class is the selection and arrangement of material in lessons. Some principles in planning lessons are:

1. Know first what is to be the aim of the lesson, and then select activities which will accomplish it. Adherence to this principle eliminates the presentation of activities in a stereotyped sequence.

~. Begin the lesson with an activity which is active, known by the students or easy to do, and well liked. This consideration is based on the psychological fact that one enjoys doing something he knows, can do, and likes to do. And children crave activity.

3. Lessons should be progressive. It is possible for material to be logical as far as difficulty is concerned, and, at the same time, psychological as far as the interests of the students are concerned.

4. Stunts serve well as the basis of the tumbling course. They develop coordination, control, flexibility, and strength in the would-be tumbler.

5. If the equipment is meager, perhaps totaling one mat, the foundation of the course should be stunts. After a certain stage is reached, one small group at a time can be initiated into mat work while the others are practicing stunts.

6. The type of stunt activities should vary in a day's lesson to avoid specialization on one or more elements. For instance, distribute wisely agility, flexibility, balance, and strength stunts in the lesson.

7. If tumbling activities are used, it is well to select a variety of types rather than to concentrate for too long a time on one. Revolving activities should be distributed well, because, if indulged in too long, headache, dizziness, and even nausea may result. Activities requiring inverted positions of the body should be participated in for only a short time.

8. Balance activities must be placed early enough in the lesson in order to have the necessary control before fatigue sets in.

9. To meet the social aims of the class, oftentimes couple and group stunts may be presented in the lesson, thus, providing opportunity for social contact and adjustment.

10. Couple stunts must be selected according to the progressive development of responsibility on the part of the participants to take care of themselves and partners.

, 11. Teach only the number of activities in the day's lesson which will allow the proper practice time for each. Self-activity is important.

U. Make the lesson plan flexible. Eliminate some activities, if necessary; have others on reserve, if needed. Be prepared to watch students' reactions and adjust to situations. If the students become fatigued, change the lesson plan to fit their physical condition. If they become interested in; one phase and their enthusiasm leads on

from the outlined lesson, include, if possible, their selection. If a particular activity does not go across, adjust the next activity, if necessary, to be sure of a successful selection, so the morale of the class will be lifted.

13. Lesson plans must consider student interests and desires. They are psychological criteria by which to plan the day's work.

14. Opportunity should be given for creative work on the part of the students. Origination of stunts, of combination of stunts, of tumbling games, and of pyramids is most valuable and possible.

15. Tumbling material with too great an element of danger for the participant has no place in the lessons in an educational institution.

16. Lessons must be planned before the class meets. The class period is teaching time, not planning time. The instructor who is wondering with the students what is coming next, is handicapping himself and students in regard to possible success.

17. Attempt to plan for more than just individual lessons. Organize the material, if possible, into larger units so the broader perspective may be gained. Adjust the individual lessons as needed.

—~.

A

KEY TO CHARTS IV, V, VI, VII, AND VIII (pp. 120-131) ~

The figures opposite the name of the stunt or tumbling activity represent the book in which the description may be found, according to the following key:

1. Cotteral, B. and D. Tumbling, Pyramid Building, and Stunts for Girls and Women. New York, A. S. Barnes and Co., 19~6.
- ~. Cotteral, B. and D. The Teaching of Stunts and Tumbling. New York, A. S. Barnes and Co., 1936.
3. Harby, S. Tumbling for Students and Teachers. Philadelphia, W. B. Saunders and Co., 193~.
4. McClow, L. L. Tumbling Illustrated. New York, A. S. Barnes and Co., 1931.
5. Pearl, N. H. and Brown, H. E. Health by Stunts. New York, The Macmillan Co., 19~1.
6. Rodgers, M. A Handbook of Stunts. New York, The Macmillan Co., 19~8.

In some instances different names have been given the same stunt by various authors. This is indicated in the charts by stating one name and enclosing others in parentheses after it.

CHART IV
ACTIVITIES REQUIRING AGILITY

Walking

Camel Walk 1, 3, 5, 6; Camel Waddle 6; Cat Walk ~ (Worm Walk 6) ; Caterpillar Walk 6; Centipede 5; Chicken Walk 6; Crab Walk 5; Cricket Walk 1; Dog Walk 6; Double Walk ~ (Companion Walk 6) ; Duck Walk ~, 6; Dwarf Walk 1 (Knee Walk 6, Stump Walk 5); Eight Legged Animal 1, ~; Elephant Walk 1, 3, 5, 6; Folded Leg Walk 1; Monkey Walk 1; Mule Walk 1; Kiddie Kar 1; Side Walk 6; Skin The Snake 1, 4; Skin The Snake Through The Legs ~; Spider Walk ~; Swagger Walk ~ (Novelty Walk 6) ; Tandem 5; Thousand Legged Animal ~; Three Legged Walk 6; Twin Walk 1; Walking Chair 1; Walking on Hands 1,3, 4, 6 (Hand Walk 5); Walrus Walk~, 6; Wheelbarrow 1; Wicket Walk 5 (Elephant Amble 6).

Running

Dog Run 5, 6; Merry-Go-Round ~, 6; The Spin 1.

Jumping

Dutch Jump 6; Finger Jump 5; Frog Hop ~ (Frog Jump 6) ; Heel Jump 5, 6; Jump Foot 5 (Wall Pivot 6); -Jump In-Jump Out 1; Jump Over Rolling Body 1; Jump Stick 5, 6; Jump Through Hands ~ (Sitting Bull 6) ; Jumping Through Hands 6; Jumping Wheelbarrow 5; Leap Frog 1, 6; Loop Leap 6; Rabbit Jump ~; Toe Jump 5 (Hopping Over Leg 6); Triple Jump Roll ~; Triple Sideward Roll 1 (Monkey Roll 3, Triple Roll 5, Tortoise Roll 6).

Springing

Backward RollII, ~, 3, 4, 5, 6; Cartwheel 1, ~, 3, 4,5,6; Dive Through Arms 1 (Flipper 5, Loop Somersault 6); Diving ~, 3, 4, 5, 6 (Forward Roll Over Body 1) ; Double Backward

CHART IV (Continued)

Roll q, 3, 4, 6 (Back Eskimo Roll 5) ; Double Forward Roll 1, q, 3, 4, 6 (Eskimo Roll 5) ; Fish Flop 3, 5; Forward Roll 1, q, 3, 4, 5, 6; Handspring 1, q, 4, 5, 6 (Front Handspring 3) ; Handspring Over Body 1 (Back Spring 5) ; Head Roll Over Bodies q; Headspring 5, 6; Headspring Over Mat q; Heel Knock 5 (Heel Click 6) ; Jumping Jack 5; Knee Flip 1 (Knee Roll 3, Knee Spring 5, 6); Round. Off 3, 4, 6; Shuttle Roll 1, 3 (Triple Dive 5, Triple Dive and Roll 6) ; Sitting Flip 1 (Back Foot Flip 5, Sitting Backward Roll 6) ; Snap Up 1, 3 (Upstart 4, 6) ; Standing Flip 1 (Down and Over 3, Shoulder Dive 5) ; The Top 5, 6 (Vertical Turn 3) ; The Triple Roll 1, 3, 4.

Kicking

Balance Touch 6; Hitch Kick 5, 6; Mule Kick 5 (Snap 6).

CHART V

ACTIVITIES REQUIRING FLEXIBILITY

Twisting

Corkscrew 5, 6; Crane Twist 6; Head Pivot 6; Pep Turn 6; Tangle q; Through The Stick 5 (Wand Serpentine 6); Under The Stick 5; Wring The Dish Rag 1 (Coffee Grinder 6).

Folding

Backward Roll 1, q, 3, 4, 5, 6; Ball Roll q; Chain Forward Roll q; Continuous Backward Roll 1; Continuous Forward Roll 1; Cricket Walk 1; Double Backward Roll q, 3, 4, 6 (Back Eskimo Roll 5) ; Double Forward Roll 1, q, 3, 4, 6; (Eskimo Roll 5) ; Fish Flop q, 5; Folded Leg Walk 1; Forward Roll 1, q, 3, 4, 5, 6; Head Roll Over Bodies q; Roll Over Back 1 (Arm Lock, 3, Back Roll Somersault 6) ; Roll Over Body q; Roly-Poly 1 (Human Ball 5, Circle Roll 6) ; Shuttle

CHART V (*Continued*)

Roll 1, 3 (Triple Dive 5, Triple Dive and Roll 6); Snail Stunt 1 (Jack Knife 6) ; Triple Roll 1,3,4; Triple Sideward Roll 1 (Monkey Roll 3, Tortoise Roll 6, Triple Roll 5); Tuck-Up ~.

Bending

Aero Dive 6; Crane Dive 5, 6; Extended Leg Rocker ~; Fish Hawk Dive 5, 6; Front Dip 6; Greet The Toe 6; Human Wicket 5; Long Legged Sitting ~; Opening The Rose 1; Pick Me Up 6; Skin The Snake 1, 4; Skin The Snake Through The Legs ~; Stiff Leg Bend 5.

CHART VI

-ACTIVITIES REQUIRING BALANCE

Stationary

Forearm Stand ~ (Forearm Balance 4, 6) ; Handstand 1, ~, 3,6; Handstand on Knees 1, ~, 6 (Shoulder Balance 3, Shoulder Stand 5) ; Headstand 1, ~, 3, 4, 5, 6; Horizontal Balance 1; Knee Balance ~; The Pedestal 1; Shoulder Rest 1 (Neck Stand 6); Single Squat ~ (One Leg Squat 6) ; Sitting Balance 1, ~, 3; Standing Balance on Feet 1, 3 (Balance Stand on Feet 6) ; Standing Balance on Hands 1; Stomach Balance 1 (Belly Balance 3, Swan Balance ~); Thigh Balance ~ (Planche 3) ; Tip-Up ~, 5, 6 (Balance on Hands, Elbows on Knees 4).

Moving

Aero Dive 6; Balance Bend 6; Crane Dive 5, 6; Cross Dip 6; Fish Hawk Dive 5, 6; Front Dip 6; "Git Up Napoleon" ~; Knee Dip 5; Single Squat 5 (One Leg Squat 6) ; Squat Kneel 6; Walking on Hands 1,3,4,6 (Hand Walk 5).

CHART VII

ACTIVITIES REQUIRING STRENGTH

Lifting

Andy Over 1 (Crotch Backward Roll 6) ; Ankle Pick-Up 3;
 Back Turn Over 1 (Back Straddle 3, 5, Daddy's Back
 Stride 6) ; Bobbin Back 5; Churn the Butter 1 (Cradle Rock
 6) ; Flying Swan ~; Front Turn Over 1 (Front Straddle 3,
 5) ; Handstand and Over Back ~ (Bobbin Ahead 5, Hand-
 stand Roll 3) ; Knee Dip 5, 6; Merry-Go-Round Nos. 1 and ~,
 ~; Rocking Stunt 1, ~ (Rocking Horse 5); Single Squat 5
 (One Leg Squat 6) ; Sitting Mount 1.

Pushing

Handstand Dip 5; Neck Spring 5 (Head Push 6) ; One Hand
 Chest Dip 6; One Hand Dip 5 (Elbow Dip 6) ; Palm Spring
 5; Run the Scale 1 (Back Stand and Sit 6); Seal Slap 6;
 Solid Ivory 5; Wheelbarrow 1,5.

Pulling

Indian Wrestle 1, 5, 6; Knee Dip 5, 6; Long Scooter ~:
 Scooter ~.

Supporting Weight

Churn The Butter 1 (Cradle Roll 6) ; "Git Up Napoleon" ~;
 Handstand on Knees 1, ~, 6 (Shoulder Balance 3, Shoulder
 Stand 5); Head Roll Over Bodies ~; Horse and Rider 1;
 Human Bar 1; Knee Balance on Back ~; Knee Flip 1 (Knee
 Roll 3, Knee Spring 5, 6) ; Knee Stand Balance 5; Lever 6;
 Merry-Go-Round ~, 6; Pedestal 1; Roll Over Back 1 (Back
 Roll Somersault 6, Elbow Roll 5) ; Shoulder Rest 1; Sitting
 Balance 1, ~, 3; Sitting Flip 1 (Back Foot Flip 5, Sitting
 Backward Roll 6); Sitting Mount 1; Standing Balance on
 Feet 1, 3 (Balance Stand on Feet 6); Standing Balance on
 Hands 1; Standing Flip 1; Standing Mount 1 (Mount to

CHART VII (Continued)

Shoulder Stand 6, Step Mount 3) ; Stomach Balance 1 (Belly Balance 3, Swan Balance fl); Stomach Flip 1 (Front Foot Flip 5, Shoulder Stomach Circle 6); Thigh Balance fl (Planche 3).

CHART VIII

ANALYSIS OF STUNT AND TUMBLING ACTIVITIES ACCORDING TO
AGILITY, FLEXIBILITY, BALANCE AND STRENGTH

Individual :	AG.	FL.	BA.	ST.
1. Aero Dive 6 _____		X	X	
fl. Ankle Throw 6 _____	X	X		
3. Backward Roll to Headstand 1, 6 -----	X	X	X	X
4. Backward Roll to Handstand 1, 6 -----	X	X	X	X
5. Backward Jump 6 _____	X			
6. Backward Roll II, fl, 3, 4, 5, 6 ----	X	X		
7. Balance Bend 6 --		X	X	
8. Balance Touch 6 _____	X		X	
9. Body Reach 5 -		X	X	X
10. Broncho Jump 6 _____	X			
11. Camel Waddle 6 _____	X	X		
fl. Cartwheel 1, fl, 3, 4, 5, 6 _____	X		X	X
13. Chair Creeper 5, 6 _____		X	X	
14. Chair Roll 4, 6 _____	X	X		
15. Chicken Walk 6 _____	X	X	X	
16. Clown Stand 6 _____	X	X		
17. Corkscrew 5, 6 _____		X		
18. Corner Crawl 6 _____	X	X	X	
19. Crab Walk 5 _____	X	X		
fl. Crane Dive 5, 6 _____		X	X	
fl. Crane Twist 6 _____	X		X	
fl. Cricket Walk 1 _____	X	X		
fl. Cross Dip 6 _____		X	X	X

CHART VIII (Continued)

Individual:	AG.	FL.	BA.	ST.
24. Diving 2, 3, 4, 5, 6 _____	X	X		
Forward Roll Over Body 1				
25. Dog Run 5, 6 _____	X	X		
26. Donkey Drive 6 _____	X		X	
27. Duck Walk 2, 6 _____	X	X		
28. Dutch Jump 6 _____	X	X		
29. Dwarf 'Walk' 1 _____	X	X	X	
Knee Walk 6				
Stump Walk 5				
30. Elbow Dip 6 _____			X	X
One Hand Dip 5				
31. Elephant Amble 6 _____	X	X		
Wicket Walk 5				
32. Fish Flop 3, 5 _____	X	X		
33. Fish Hawk Dive 5, 6 _____		X	X	
M. Floor Dip 5 _____				X
35. Folded Leg Walk 1 _____	X	X	X	
36. Football (Shoulder Roll) 4 _____	X	X		
37. Forearm Balance 4, 6 _____	X		X	X
Forearm Stand 2				
38. Forward Roll II, 2, 3, 4, 5, 6 _____	X	X		
39. Free Standing 6 _____		X		X
40. Frog Dance 5 _____	X	X	X	
41. Frog Jump 6 _____	X	X		
Frog Hop 2				
42. Front Dip 6 _____		X	X	
43. Front Leg Cut 6 _____	X	X	X	X
44. Greet The Toe 6 _____		X	X	
45. Hand Spring 1, 2, 4, 5, 6 _____	X		X	X
Front Handspring 3				
46. Hand Walk 5 _____	X		X	X
Walking On Hands 1, 3, 4, 6				
47. Head Spring 5, 6 _____	X	X		X
48. Headstand 1, 2, 3, 4, 5, 6 _____	X		X	X
49. Heel Jump 5, 6 ~ _____	X	X		X

CHART VIII (Continued)

<i>Individual:</i>	AG.	FL.	BA.	ST.
50. Heel Click 6 _____	X			
Heel Knock 5				
51. High Kick 5 _____	X	X	X	
5~. Hitch Kick 5, 6 _____	X	X		
53. Horizontal Balance 1 _____		X	X	
54. Human Knot 5, 6 _____		X		
55. Human Wheel 5 _____	X	X		
56. Human Wicket 5 _____		X		
57. Jump Foot 5 _____	X	X		
Wall Pivot 6				
58. Jumping Jack 5 _____	X	X	X	
59. Jump In-Jump Out 1 _____	X	X		
60. Jump Through Hands ~ -c-----	X	X		X
Sitting Bull 6				
61. Jump Stick 5, 6 _____	X	X		
6~. Jumping Through Hands 6 --__	X	X		
63. Knee Dip 5, 6 _____		X	X	X
64. Knee Mark 6 _____			X	
65. Knee Snap 6 _____	X	X		X
66. Long Legged Sitting ~ _____		X		
67. Monkey Walk 1 ~ _____	X	X		
68. Monkey Mark 6 _____			X	X
69. Mule Kick 5 _____	X		X	X
Mule Walk 1				
Snap 6				
70. Novelty Walk 6 _____	X		X	
Swagger Walk ~				
71. One Arm Pivot 6 _____	X			X
7~. Palm Spring 5 ----c-----				X
73. Pick Me Up 6 _____		X		
74. Pray Do 6 _____		X	X	X
75. Rabbit Jump ~ _____	X	X		
76. Rising Sun 6 _____	X	X	X	X
77. Rocker 1 _____		X	X	
Human Rocker 5, 6				
78. Rolling Log 6 _____	X			X

CHARTVIII (Continued)

<i>Individual:</i>	AG.	FL.	BA.	ST.
79. Roly-Poly 1 _____	X	X		
Circle Roll 6				
Human Ball 5				
80. Russian Bear 1 _____	X	X	X	
Bear Dance ~				
Russian Rabbit 6				
81. Seal Slap 6 -- _____	X			X
8~. Shoulder Rest 1 _____	X	X	X	X
Neck Stand 6				
83. Single Squat 5 _____		X	X	X
One Leg Squat 6				
84. Snail Stunt 1 _____		X		
Jack Knife 6				
85. Snap Up 1, 3 _____	X	X	X	X
Upstart 4, 6				
86. Squat Kneel 6 -----		X	X	X
87. Stiff Knee Twist 6 --- _____		X		
88. Tangle ~ _____		X		
89. Three Legged Walk 6 -----	X		X	
90. Through Stick 5 _____	X	X	X	
Wand Serpentine 6				
91. Tip-Up ~, 5, 6 _____		X	X	X
Balance on Hands, Elbows on Knees 4				
9~. Toe Jump 5 --- _____	X	X		X
Hopping Over Leg 6				
93. Top, The 5, 6 _____	X		X	
Vertical Turn 3				
94. Tuck-Up ~ _____		X		X
95. Under Bridge 6 _____		X	X	
96. Under The Stick 5 _____		X	X	X
97. Walking on Hands 1, 3, 4, 6---. X			X	X
Hand Walk 5				
98. Walrus Walk ~, 6 " _____	X			X
99. Wicket Walk 5 _____	X	X		
Elephant Amble 6				
100. Worm Walk 6 _____	X	X		
Cat Walk ~				

CHARTVIII (Continued)

<i>Couple :</i>		AG.	FL.	BA.	ST.
I.	Andy Over 1 _____	X	X		X
	Crotch Backward Roll 6				
~.	Back Turn Over 1 _____	X	X		X
	Back Straddle 3, 5				
	Daddy's Back Stride 6				
3.	Backward Thigh Stand 6 _____	X		X	X
4.	Bouncing Ball ~ _____	X	X		
5.	Camel "V"alk 1, 3, 5, 6 -c-----	X	X		X
6.	Churn The Butter 1 _____	X	X	X	X
	Cradle Roll 6				
7.	Double Roll (Forward or Back- ward) 1, ~, 3, 4, 6 _____	X	X		X
	Eskimo Roll 5				
8.	Double Spring Seat 6 _____	X	X	X	
9.	Double Walk ~ _____	X			X
	Companion Walk 6				
10.	Eight Legged Animal 1, ~ _____	X	X		
II.	Extended Leg Rocker ~ _____		X	X	
U.	Elephant Walk 1, 3, 5, 6 _____	X	X		X
13.	Flying Swan ~ _____	X		X,	X
14.	Forward Turn Over 1 _____	X	X		X
	Front Straddle 3, 5				
	Daddy's Front Stride 6				
15.	"Git Up Napoleon" ~ _____	X		X	X
16.	Greetings 1 _____	X	X		
17.	Hand Spring Over Body 1 _____	X		X	X
	Back Spring 5				
18.	Handstand and Over Back ~ _____	X	X		X
	Bobbin Ahead 5				
	Handstand Roll 3				
19.	Handstand on Knees 1, ~, 6 _____	X		X	X
	Shoulder Balance 3				
	Shoulder Stand 5				
~O.	Horse and Rider 1 _____	X		X	X
~I.	Indian Wrestle 1, 5, 6 _____	X	X	X	X
~~.	Jack in the Box 1 _____	X	X	X	

CHARTVIII (Continued)

<i>Couple:</i>	AG.	FL.	BA.	ST.
fl3. Jumping Wheel Barrow 5 _____	X		X	X
fl4. Kiddie Kar 1 _____	X	X		
fl5. Knee Balance On Back fl _____			X	X
fl6. Knee Flip 1 _____	X		X	X
Knee Roll 3				
Knee Spring 5, 6				
fl7. LeapFrog 1, 6 _____	X			X
fl8. Rocking Stunt 1, fl _____	X	X	X	X
Rocking Horse 5				
fl9. Roll Over The Back 1 _____	X	X	X	X
Back Roll Somersault 6				
Elbow Roll 5				
30. Run The Scale 1 _____		X		X
Back Stand and Sit 6				
31. SiameseTwins 1 _____	X		X	X
Double Cartwheel				
3fl. Scooter fl _____	X	X	X	X
33. Sitting Balance 1, fl, 3 _____			X	X
34. Sitting Flip 1 _____	X	X		X
Back Foot Flip 5				
Sitting Backward Roll 6				
35. Sitting Mount 1 _____			X	X
36. Spin 1 _____	X		X	
37. Standing Balance on Feet 1, 3__	X	X	X	X
Balance Stand on Feet 6				
38. Standing Balance'on Hands L	X		X	X
39. Standing Flip 1 _____	X	X	X	X
Down and Over 3				
Shoulder Dive 5				
40. Standing Mount 1 _____	X	X	X	X
Mount to Shoulder Stand 6				
Step Mount 3				
41. Stomach Balance 1 _____		X	X	X
Belly Balance 3				
Swan Balance fl				

CHART VIII (Continued)

Couple:	AG.	FL.	BA.	ST.
4~. Stomach Balance to Headstand 1 _____~		X	X	X
43. Stomach Flip 1 _____	X	X	X	X
Front Foot Flip 5				
Shoulder Stomach Circle 6				
44. Tandem 5 _____	X	X		X
45. Tete-a-Tete 6 _____		X		X
46. Thigh Stand Balance ~ _____			X	X
47. Twin Walk 1 _____	X			
48. Twister 1, 5, 6 _____	X	X		
49. Wheelbarrow 1, 5 _____	X			X
50. Wringing Dish Rag 1 _____	X	X		
<i>Group:</i>				
1. Archway 1 _____		X	X	X
~. Centipede 5 _____	X	X		X
3. Chain Forward Roll ~. _____	X	X		
Skin The Snake By Rolls 4				
4. Dive Through Arms 1 _____	X	X		X
Flopper, The 5				
Loop Somersault 6				
5. Forward Roll Over Body 1 _____	X	X		
Distance Dive 5				
Dive and Roll 6				
Dive ~				
6. Head Roll Over Bodies ~ ____:	X	X		X
7. Human Bar 1 _____	X		X	X
8. Jump Over The Rolling Bodies 1 -----7-----	X			
9. Long Scooter ~ _____	X	X	X	X
10. Merry-Go-Round No. 1, ~ _____	X			X
11. Merry-Go-Round No. 4, ~ _____	X			X
U. Opening The Rose 1 _____		X		X
13. Pedestal 1 _____	X	X	X	X

CHARTVIII (Continued)

Group:	AG.	FL.	BA.	ST.
14. Shuttle Roll 1, 3 _____ Triple Dive 5 Triple Dive and Roll 6	X	X		
15. Skin The Snake 1, 4 _____	X	X		
16. Stiff 5 _____			X	X
17. Thousand Legged Animal ~ ____	X	X		
18. Triple Roll 1, 3, 4 _____	X	X		
19. Triple Sideward Roll 1 _____ Monkey Roll 3 Tortoise Roll 6 Triple Roll 5	X	X		
~0. Walking Chair 1 _____	X	X	X	X

CHAPTER VI

SUPERVISION OF STUNTS AND TUMBLING

TUMBLING, as a physical activity, needs careful supervision of the participant and of the equipment by the instructor. As stunts and tumbling are taught, it is necessary to consider the participant as an integrated personality with definite physical, psychological, and social characteristics. A teacher of tumbling should have a thorough knowledge of these characteristics of each age group, for a consideration of them influences the selection of material and teaching procedures. Chart IX shows general characteristics of students from the primary grades through the high school, and, in light of these characteristics, presents general principles for the teaching of stunts and tumbling (see page 138).

Important factors in the supervision of tumbling by the instructor are the selection of the proper type of organization of the students, and teaching procedures. For a discussion of these see Chapters IV and III, respectively.

SAFETY IN TUMBLING

The very nature of stunt and tumbling activities, most of which require unusual manipulations of the body, necessitates that efficient provision be made for the safety of the participants. This provision should include a wise selection of activities and adherence to the principle that in educational institutions participation of the students in tumbling should be an educational experience, rather than a specialized training to perfect spectacular feats. If this principle is observed it will guide the instructor in eliminating activities which have an excessive amount of danger elements, calling for undue risk on the part of the performer. As the advanced stage of tumbling

is reached, the desire of the students for more and more difficult stunts and tumbling feats may be turned into more desirable channels of creative work, including origination of new activities and combination of activities, and service as leaders and student assistants.

In addition to the wise selection of activities, the instructor has the responsibility of promoting safety by: (1) developing on the part of the students knowledge, habits, skills, and attitudes which promote safety; (2) anticipating safety needs of students and, through organization, administration, and correct teaching, prevent and eliminate hazards. The number of hazards in tumbling depends to a large degree upon the efficiency of the instructor in meeting the above responsibilities.

If the instructor accepts the modern view that accidents do not just happen but are caused, there will be a tendency to anticipate causes and to make provision to prevent their occurrence. This procedure tends to promote greater safety for the students.

The causes of accidents in tumbling fall into two classes:

- (1) situations in which the tumbler causes accidents to himself;
- (2) situations in which the tumbler causes accidents to others.

The time of accidents in tumbling very often is before class or after class, or during the time when the tumbler is waiting his turn and decides to attempt the activity at an inappropriate place or moment.

An effective method by which to prevent accidents and to develop ability on the part of the students to take responsibility of safeguarding themselves and others, not only when in the presence of the instructor, but elsewhere, is to set forth standards for safety. To assure greater acceptance and observance of the standards, it is best to have the students participate in the making of them. It is possible to post the list of standards adopted by the students on the bulletin board. As a new standard is established it is added to the list. The instructor plays an active part in guiding the students to become conscious of the situation needing a standard, and leading them to formulate desirable standards.

The following standards are suggested.

A. Personal Standards for the Tumbler

A good tumbler:

1. Participates in tumbling activities only in the propel' environment.
- ~. Participates in tumbling activities only when in proper costume.
3. Has the clothing free of pins, and pockets empty of objects.
4. Takes part in tumbling activities only when the body is in good physical condition.
5. Takes care of body elimination before participating in tumbling activities.
6. Attempts only activities the performance of which requires proper use of the parts of the body.
7. Attempts stunts which are within own ability.
8. Works up to difficult activities by progressive steps.
9. When balance is lost attempts to regain it under control.
10. Stops participation when fatigue sets in.

B. Standards for the Tumbler Working with Others

A good tumbler:

1. When working with others attempts to control the body so as to endanger no other participant.
- ~. Is responsible for the proper spacing of the activity when more than one are working on the mats.
3. Before attempting a stunt sees that those nearby are aware of the activity.
4. Interferes with no one who is doing a stunt.
5. Cooperates with traffic regulations when participating in activities requiring them.
6. Lifts only individuals who are lighter in weight than self.
7. Persuades a companion to attempt a stunt only when convinced that the companion has ability to do the stunt and is in condition to attempt it.
8. Signals to others before releasing grasp.

TUMBLING FOR GIRLS

The aims of the tumbling program for girls should coincide with, and contribute to, the aims of physical education in general for girls. Acceptance of this principle results in the avoidance of activities which are not fitted for the girl and the exploitation of a few girls at the expense of the many.

The physiological make-up of the girl should be a deciding factor in selecting activities and administering the tumbling program. The girl normally does not have a great development of strength. Her shoulders and wrists are not as strong as those of boys. While strength has been found to be a factor that influences skill and success in performance, on the other hand, an unusual development of strength has no social value for the girl. In light of this viewpoint, activities which require an undue amount of strength should not be stressed in the girl's tumbling program. Instead, those activities requiring agility, flexibility, and balance are valued more. Practically, this consideration eliminates activities requiring much weight lifting or supporting of weight.

The body build of the girl affects decidedly her success in tumbling activities. The same degree of success cannot be expected of all girls in all types of activities. A girls' program should offer a variety of activities as a means of making success possible for a larger range of participants.

Tumbling is sanctioned for girls only when they are in good physiological condition.

The normal use of joints should be stressed for girls as for boys. It is believed that extreme back bendings have an undesirable effect and, therefore, should be avoided.

If the tumbling program is administered according to accepted principles for physical education for girls, there will be no place for the development of a few skilled tumblers at the expense of the many. The wise instructor of a tumbling class will provide efficient organization so that the needs of all students may be taken care of.

SUPERVISION OF EQUIPMENT

The provision of mats and the care of them are essential elements in the administration of a successful tumbling program. Standard mats may be purchased from reliable firms which specialize in their manufacture. The mats vary in size, covering, and filler. A five by seven foot mat, two inches in thickness, is a serviceable one. It is wide enough to permit participation in activities across its width, and long enough to accommodate two or more tumblers in many activities. This size offers the advantage, also, of being of a weight which can be moved efficiently. This is a point which is essential to consider in the care of the mat, especially with younger students, for, if the mat is too heavy for four people to carry with ease, it will be dragged.

The covering of mats usually is heavy canvas or duck which comes in weights varying from twelve to sixteen ounces. The fourteen ounce is a satisfactory weight. The usual filler for mats is wool felt or hair felt. The hair felt is more serviceable because it does not flatten out so quickly. A sponge rubber mat, also, is manufactured.

The care of mats involves standards for use, cleaning, and storage. If the mats are piled one on top of the other for storage, the floor sides should come next to each other or the top sides. Mats are soiled when in use mainly by shoes. If the standard is kept that the participant shall not walk on the mat unnecessarily, much of the soiling can be prevented.

In spite of the most efficient care, however, mats will become dusty. The vacuum cleaner offers the most desirable method for cleaning. The mat may be protected during daily use by a coverlet. The coverlet may be made of canvas or other heavy material. It may be constructed to slip over the mat, thus, covering both sides, or it may be laced together on the under side. In either case, slits should be made at the sides to permit the handles of the mat to project. It is most important to shrink the material thoroughly before cutting it, to insure proper fitting of the coverlet. The coverlets can be removed

and sent to the laundry whenever they become soiled. Fresh clean coverlets invite participation and motivate a more careful consideration of the care of the mats.

. The mats may be hung when not in use by a simple method of putting proper spaced hooks on the wall, or on a movable rack, or they may be piled on a movable platform. The hanging insures better ventilation, prevents dust catching to a greater extent, and removes the possibility of the mats being trampled on, as may happen when they are placed on the platform. The disadvantage of the hooks lies in the fact that they necessarily must be placed high enough to lift the mats from the floor and, if younger students are asked to move the equipment, it is difficult for them to handle the mats with ease. If the instructor has the services of a janitor, this problem is eliminated to a greater extent. The movable platform makes it possible to roll the mats to the working space when they are needed, thus decreasing the distance for the carrying of them, and likewise, it facilitates the removal of the mats from the floor.

INSTRUCTOR'S STANDARDS

A summary of the previous discussion of the supervision of stunts and tumbling can be stated in terms of standards for instructors. An efficient instructor:

1. Provides a healthy environment for stunt and tumbling activities.

91. Is responsible for keeping the mats in sanitary condition.

3. Insists on proper costumes.

4. Keeps close supervision of the students.

5. Anticipates the requirements of an activity, and prepares the students to meet the requirements. For instance, students should be shown the proper way of descending from the Headstand before attempting the activity.

6. Presents activities in a progressive sequence, according to the ability of the students.

7. Organizes the students for participation in the most efficient way to prevent interference with the activity.

8. Provides proper traffic regulations for group activities.

9. Sanctions only activities which require legitimate use of the parts of the body.

10. Considers the safety of the students of more importance than the display of spectacular feats involving undue hazards. For instance, a limit should be set upon the number of students over which a tumbler should dive.

11. Provides opportunity for proper development of the students' bodies for activities, such as strengthening of the wrists for the Handstand.

CHART IX

APPLICATION OF THE CHARACTERISTICS OF STUDENTS TO THE TEACHING OF STUNTS AND TUMBLING

PRIMARY GRADES-. AGES 6-8

CHARACTERISTICS

APPLICATIONS TO TUMBLING

A. *Physical Characteristics*

The child is very active in a motor way. His actions are not well coordinated, because the highest motor centers are not completely developed. He spontaneously uses the fundamental muscles, especially those of the legs. The legs grow in power and in length. As he advances in the primary grades, his muscular activity increases rapidly, and his control over the fundamental muscles increases. There is a gain in strength.

The child's heart is small proportionately to the demands made upon it. Therefore, he tires easily and quickly. The third grade year often is called the fatigue year, due to the strain upon the body as slow development of the heart and adaptation take place.

If stunts and tumbling are given in the primary grades, emphasis should be put on motor activity which involves the big muscles and which does not call for precise skill. Only those activities should be used which require simple coordination of the large muscles. Such activities as the simple animal walks are appropriate. Eliminate activities calling for an undue amount of balance, control, and strength.

The activity must not be unduly strenuous, or be continued too long. Rest periods should alternate activities that call for more vigorous action. The child should not be over stimulated. Avoid activities requiring undue strength.

CHART IX-(Continued)

PRIMARY GRADES-AGES 6-8-(Continued)

CHARACTERISTICS

APPLICATIONS TO TUMBLING

A. Physical Characteristics (Continued)

The child's bones are plastic and his spine is flexible.

No activity should be included which calls for undue weight being put on parts of the body. A simple Forward Roll, the common somersault of childhood, can be offered. However, relaxation and tucking the body low to the mat should be emphasized rather than having the weight kept for too long a time on the hands.

All stunts requiring extreme or questionable use of joints should be eliminated, such as back bendings.

B. Psychological Characteristics

The child possesses a love for imitation and, to a great extent, it is through this means that he learns. He has an active imagination. He is interested in rhyme, rhythm, and jingles. As he advances in the primary grades he becomes creative. He is interested in activity rather than results.

His attention span and perseverance are of short duration. Reasoning powers are not developed.

Simple stunts involving imitation of actions of animals or things are appropriate. There is a place for creative work in this imitation. Sheer joy in the activity itself should be stressed, with little demand made upon end results. Rhythm should be emphasized in the stunts and, wherever possible, music or some rhythmic sound should accompany the activity.

The instructor should time the presentation of the activity and participation of the children to conform with the relative length of their attention span and endurance.

CHART IX-(*Continued*)PRIMARY GRADES-AGES 6-8-(*Continued*)

CHARACTERISTICS

APPLICATIONS TO TUMBLING

B. Psychological Characteristics (Continued)

He accepts suggestions readily; forms habits easily.

The instructor should suggest desired reactions and show approval when they are expressed. Care should be taken to see that right physical, mental, and social habits are formed.

He is apt to become discouraged if he does not realize success.

The instructor should select activities which are within the range of the ability of the children. Careful attention should be given to the progression of stunts so that success in achievement is possible.

He laughs freely and loves humor.

Make the tumbling class a happy class.

C. Social Characteristics

He is very individualistic, and, hence, lacks group consciousness. He is apt to be noncooperative with the group. The approval of the teacher means more to him than that of his classmates.

Stunt activities should be individual. Sometimes these may be put into game forms, but individual performance and opportunity for self-activity should be emphasized. Activity should be emphasized rather than competition. Gradually emphasis should be placed by the instructor on desirable cooperative acts which tend to initiate group consciousness, such as taking turns at the mats, approval of good performance by classmates, expression of good will, etc.

CHART IX-(Continued)

INTERMEDIATE GRADES-AGES 9-11

CHARACTERISTICS

APPLICATIONS TO TUMBLING

A. Physical Characteristics

Both boys and girls are very active. Some authorities speak of this period' as one of expenditure of energy as a means of storing up energy for the next period.

The body is not growing rapidly in height and weight during most of the period, and as a result, there is a perfecting of the use of the body as it is. A development of finer coordination in motor activities takes place. This is accompanied by an interest in physical powers and a desire to test own ability.

The organization of the class should permit activity on the part of the student and avoid long periods of standing while waiting for turns.

Stress motor activity with an increasing emphasis on skill. Definite work on technique should be started but not to the degree that it saps the love of activity from the child. Constant repetition is needed to bring about learning. Give each child a chance to get the fundamental skills and to increase his repertoire of skill. By all means, special work must be done with the physically unskilled child. If he is permitted to leave the fourth and fifth grades physically retarded, there is great danger of him becoming physically inactive, due to being conditioned to nonsuccess. Use skilled divisions for part of the class work in order to meet the needs of the various individuals. Meet the interest in physical powers by offering stunts as self-testing activities. Progression is very important, that a satisfactory degree of success may be attained. Use a progressive element of difficulty in the stunts to offer

CHART IX-(*ContiInued*)INTERMEDIATE GRADES-AGES 9-11-(*ContiInued*)

CHARACTERISTICS

APPLICATIONS TO TUMBLING

A.. Physical Characteristics (Continued)

The heart still is proportionately small. There is some increase in strength, but this is limited due to lengthening of bones and muscles. Boys have more strength and endurance than girls.

challenge and, thus, meet the child's desire for development in skill. Give knowledge of results by charts and other devices.

Avoid strain of overexercise. The child should not be taxed in strength or endurance. Tumbling activities which involve the supporting of own weight, as the Headstand, Cartwheels, etc., may be used, but those which require the supporting of external weight should be avoided. Boys and girls should be separated in their classes and the same standards should not be used to compare the work. Girls, due to flexibility and relaxation, sometimes have better use of their bodies than boys in the tumbling activities.

B. Psychological Characteristics

He seeks facts and information, and remembers well. He observes carefully. Reasoning powers are developing, but still are weak.

Increase the knowledge of the student concerning stunts and tumbling activities and let him understand facts concerning technique to a greater extent. Opportunity should be given the students for self-direction and self-activity. Let the students participate in the class management. The problem solving method should be used. Class discussions are valuable. The in-

CHART IX-(*Cm, tinued*)INTERMEDIATE GRADES-AGES 9-11-(*Continued*)

CHARACTERISTICS

APPLICATIONS TO TUMBLING

B. Psychological Characteristics (Continued)

The attention span and perseverance are longer.

A greater interest develops in the results of activities. There is a desire for certainty of things.

C. Social Characteristics

He is still individualistic to a great degree, but interest and consciousness of the group are developing. There is an increased desire for law and order. As this period advances, there is a development of loyalty.

structor must be ready to guide the thinking for drawing of conclusions. The selection of activities should be approached from the viewpoint of solving some problem or meeting some need.

The instructor may allot more time to specific activities, but ever should be watchful for lapse of attention and fatigue.

Give the pupil an opportunity to know the results of his efforts. Evaluate results of individual and group work. Bring in games involving a climax, and simple contests. Always give the final score. Be definite in matters pertaining to class procedures, games, and contests.

The basis of the tumbling work should be individual activity. Promote group consciousness through squad and team organization. As responsibility develops, bring in simple couple stunts, graded not only by difficulty but by the amount of safety needed to protect each individual. Bar all couple stunts requiring weight lifting. Group activity may be initiated through the development of groupings:

CHART IX-(*Continued*)INTERMEDIATE GRADES-AGES 9-11-(*Continued*)

CHARACTERISTICS

APPLICATIONS TO TUMBLING

C. Social Characteristics (Continued)

Pyramids are questionable if they require weight lifting for necessary height. Tumbling games involving simple team action, simple team contests, and relays may be used. Do not change the groups for the pupil too often, but give a chance for the group to mean something to him.

JUNIOR HIGH SCHOOL-AGES 12-14

CHARACTERISTICS

APPLICATIONS TO TUMBLING

A. Physical Characteristics

Pubertal changes are taking place. There are marked hip and pelvic changes in the girls. It is a period of rapid growth, due mainly to the lengthening of the legs. Awkwardness in the management of the body is present, caused by the need of readjustment. During this period there is apt to be an accumulation of waste products within the body which tends to produce a disinclination to exercise. Postural defects occur frequently. There is an increase in strength from the last period.

Girls should participate in tumbling only when in good physiological condition. Stunts requiring various uses of the body should be used. The fundamental tumbling skills should be stressed. Emphasis should be placed in classwork on participation, rather than on individual accomplishment. Motivate carefully and plan lessons thoughtfully to obtain proper progression according to needs of students. Work through skilled divisions to take care of individual needs. Arrange for extracurricular work to satisfy those with greater interest or skill. Activities necessitating one individual supporting the weight of another should be avoided.

CHART IX-(Continued)

JUNIOR HIGH SCHOOL-AGES 1~14-(Continued)

CHARACTERISTICS

APPLICATIONS TO TUMBLING

B. Psychological Characteristics

Reasoning powers have developed to a greater extent.

Develop through discussions the "why" back of success or nonsuccess in the tumbling activities.

The attention span has increased. Perseverance is apt to be marked by a fluctuating desire for activity.

Guard against carrying a piece of work over too long a period of time. Use smaller units to insure accomplishment.

There is a tendency toward self-consciousness and shyness.

Organize the class work in such a way so the student does not feel that he is the center of attention when he is performing.

The individual analyzes the effect of situations in terms of his own personal reactions.

Make the tumbling class pleasant. Avoid activities which are not liked and which produce an unpleasant sensation.

C. Social Characteristics

There is a greater realization of the social group and an appreciation of one's place in the group.

The tumbling work should be organized on the basis of groups. Give each individual an opportunity to share in group work. Let the results of group work be shown. Watch carefully for social maladjustments. Couple activities are valued in so far as they do not cause a physical burden on anyone individual. Group contests of simple nature and stunt relays are liked by this age group.

CHART IX--(Continued)

SENIOR HIGH SCHOOL--AGES 15-18

CHARACTERISTICS

APPLICATIONS TO TUMBLING

A. Physical Characteristics

Important sexual development takes place. The individual is taxed during this period of change. Growth is nearing completion; There is an increase in girth accompanied by an increase in the size of the organs which tends to insure greater vitality. Poor posture is frequent as readjustment takes place. There is an increase in strength but the individual does not have the strength of an adult.

A finer development of the use of the muscles takes place, resulting in greater skill.

Largeness of stature necessarily does not indicate strength or endurance. Therefore, avoid overworking the large boy or girl as undermounts. Couple or group stunts and pyramids requiring lifting or supporting of weight may be used to a reasonable degree, providing that proper technique is taught and the individual is protected from undue strain. There is need for careful supervision.

Better technique and more skilled performance can be expected of individuals who have a history of active years back of them. More difficult tumbling feats may be attempted. See discussion of safety, page 13~.

B. Psychological Characteristics

Individuals who have average or above average skill are interested in physical feats.

Use careful progression to make accomplishment possible to a large range of individuals. Provide skilled divisions to take care of differences in ability, and stage of development. Provide extracurricular participation for those who have greater skill and interest. Tumbling contests and meets, as class or extracurricular projects, serve well.

CHART IX-(Continued)

SENIOR HIGH SCHOOL-AGES 15-18 (Continued)

CHARACTERISTICS

APPLICATIONS TO TUMBLING

B. *Psychological Characteristics (Continued)*

This is a period of intellectual activity. There is a desire to reach adult ability and standards. High school students are very critical.

Bring the students in contact with a larger range of written material on tumbling. Give opportunity for them to participate in the class management, in organizing meets and contests, and in originating new stunts and combinations. Develop on the part of the individuals the ability to evaluate performance.

C. *Social Characteristics*

There is a tendency to broaden social groups. Loyalty to associates marks this period.

In class work provide an opportunity for students to have a wide range of social contacts. Also, develop group work in squads or teams for informal class projects or contests and meets.

PART II

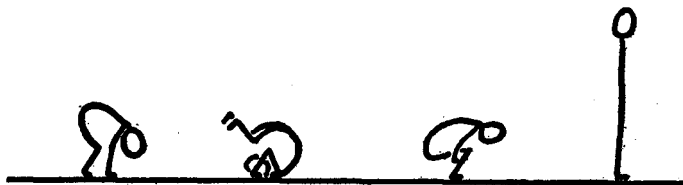
STUNT AND TUMBLING MATERIAL

CHAPTER VII

ROLLS

A. FORWARD ROLLS

I. FORWARD ROLLS FROM STATIONARY APPROACH



THE individual stands at the edge of the mat, bends and separates the knees, and places the hands on the mat in front of, and close to, the feet, shoulder width apart with the fingers pointing straight ahead. Bearing the weight on the hands, the head is tucked down and a push is taken from the floor with the feet. As the body begins to turn from the momentum of the push, the elbows bend, letting the rounded body with flexed knees and tucked head roll onto the shoulders and back, and, finally, onto the feet. The individual gives a push with the hands as they leave the mat; then by a forward swing of the arms finishes with them in front of the body, or grasps the shins, thus, tucking the legs close to the body. From the momentum of the Roll and the swing of the arms, the body weight is centered over the feet and the standing position is gained.

Teaching Suggestions: In order to get the head tucked sufficiently, it is helpful to suggest to the beginners to tuck the head down between the knees.

Throughout the Roll the knees must be flexed and the head tucked to obtain the necessary rounded contour of the body.

The individual may have the tendency to put the weight on the head during the Roll. This should be corrected by tucking

the head and bearing the weight on the hands until the shoulders touch the mat. If any part of the head touches the mat at all, it should be only a slight brushing of the back of the head.

The grasping of the shins tends to draw the feet closer to the body, thus, making it easier to center the body weight over them. The forward swing of the arms aids in carrying the body over the feet, resulting in the same effect.

If the individual is unable to rise from the Roll, the following may be contributing causes:

1. The body is flattened during the Roll, instead of being kept rounded.
2. The push from the feet and hands has not been sufficient to give the necessary momentum which is needed to carry the body over the feet. The Roll slows up near the completion.
3. The arms have not contributed to the momentum by a forward swing.
4. The trunk and head have not been carried over the feet. Students having difficulty in rising should emphasize all forward movements of arms, head, and trunk near the completion of the Roll.

A Forward Roll performed in good form should be finished by the individual standing.

A Forward Roll, otherwise performed in good form, may be ruined by the individual taking a step backward as the rising position is taken. This shows lack of momentum to allow for a balanced position over the feet. Correct by giving the student the feeling that, as soon as the rising position is gained, a step forward is to be taken. This usually results in the student emphasizing all forward movements to the extent of being balanced over the feet at the end of the Roll.

When first attempting to roll without touching the head to the mat, an individual is apt to land heavily on the back. This often is due to an inaccuracy in the direction of the push of the feet, with too much emphasis on an upward push rather than a forward push. Sometimes, the arms in holding the weight of the body bend too suddenly, thus, causing the weight to be received on the back too forcibly. Again, if the back is flattened

instead of rounded, it is apt to come in contact with the mat with a jar to the body.

A crooked Roll on the mat is often the result of not taking an even push from both feet. Again, it may be due to not bearing the weight equally on both hands. As a result, one elbow is bent until often the forearm is placed on the mat, while the other hand remains on the mat. The body rolls toward the bent elbow, resulting in an inaccurate Forward Roll.

VARIATIONS OF FORWARD ROLL FROM STATIONARY APPROACH

1. *Hands Holding Ankles*

The individual places a hand on each ankle and rolls, coming to a stand without changing position of the hands.

2. *Hands Holding Toes*

The individual grasps the forward part of each foot with the hands and rolls, coming to a stand without changing position of the hands.

3. *Hands Holding Heels*

The individual grasps the heels with the hands and rolls, coming to a stand without changing position of the hands.

4. *Hands on Knees*

The individual places a hand on each knee and rolls, coming to a stand without changing position of the hands.

5. *Arms Crossed, Hands Holding Toes*

The individual crosses the arms and, reaching down, grasps the forward part of each foot with the hands. The Roll is taken and the standing position is regained without changing the position of the hands.

6. *Arms Crossed, Hands Holding Heel.~*

The individual crosses the arms in back and, reaching down, grasps the heel of each foot with the hands. The Roll is taken and the standing position is regained without changing the position of the hands.

7. Arms Crossed, Hands on Knees

Same as *No. 4*, except the arms are crossed before being placed on the knees.

8. Arms Crossed, Feet Crossed, Hands Holding Toes

Same as *No. 5*, except the arms and legs are both crossed before the toes are grasped.

9. Hands Clasped Behind the Knees

The individual clasps the hands behind the knees and rolls, coming to a stand without unclasping the hands.

10. Hands Holding Knickers •

The individual grasps the knickers at the side of the body and rolls, coming to a stand without changing the position of the hands.

11. Hands on Hips

The individual places the hands on the hips and rolls, coming to a stand without removing the hands.

12. Hands on Shoulders

Same as *No. 10*, except the hands are placed on the shoulders.

13. Hands Behind the Head

Same as *No. 10*, except the hands are placed on the neck behind the head.

14. Arms Folded on Chest

The individual folds the arms on the chest and rolls, coming to a stand without changing the position of the arms.

15. Arms Folded Behind the Back

Same as *No. 14*, except the arms are folded behind the back.

16. Soldier Roll

The individual stands at attention, salutes, keeping hand to forehead, and rolls, coming to a stand without losing the salute position.

17. Tailor Fashion Roll

The individual folds the arms on the chest, crosses the legs, and rolls, coming to a stand in the original position.

18. Sailor Roll

The individual places the back of one hand against the center of the back and the palm of the other hand against the front of the body. The roll is taken and the standing position regained without changing the arm positions.

19. CO'ltrtcsyRoll

The individual grasps the knickers at the side of the body, courtesies by placing one foot in back of the other and bending both knees, then rolls, regains the standing position, and courtesies.

20. Humpty Dumpty Roll

The individual squats down to a deep knee bend and wraps the arms around on the outside of the knees and grasps either the opposite knee or the opposite elbow. In this closely tucked up position, the head is bent down and the roll is taken, at the end of which the same position is kept.

21. Roll, Clap Hands

The individual claps the hands during one of the specific episodes of the Roll, or as many times as possible, as follows:

- a.* Before the spring from the feet and after the standing position is regained.
- b.* After the spring from the feet.
- c.* During the Roll.
- d.* After the tuck-up.

22. Roll, Whistling

The individual does a Forward Roll whistling throughout the act.

23. Forward Roll from Rolled Mat

A mat is rolled up and placed on a floor mat. The individual takes various positions on the rolled mat and from there does a Forward Roll on the floor mat as follows:

- a. Kneel on rolled mat, place hands on floor mat, and roll.
- b. Squat on the rolled mat, reach with hands towards the floor mat, receive weight on the hands and roll forward.
- c. Stand on rolled mat, reach with hands toward the floor mat, receive weight on the hands, and roll forward.

II. FORWARD ROLLS FROM MOVING APPROACH

FROM RUN

The individual runs forward a few steps, takes a jump onto both feet, and immediately springs from them with the body inclined forward and the arms reaching forward ready to receive the weight. As the landing is made on the hands, the head is tucked, the knees are flexed, and the body rolled over as in the Forward Roll from a stand.

Teaching Suggestions: Some individuals have a tendency to spring from one foot instead of taking the jump from both. As a result, one leg is kept in an extended position while the other is flexed. This dissimilar action of the legs tends to cause a lengthening out of the body, preventing the rounded contour, which is necessary for a desirable Roll.

See teaching suggestions for Forward Roll from a Stand.

FROM SKIP

The individual skips to the mat, jumps from both feet; rolls, springs, and, after regaining the standing position, skips off without breaking the rhythm.

CRICKET WALK, ROLL

The individual takes the position for the Cricket Walk,¹ walks forward a few steps, rolls forward without losing the position, and walks off with the Cricket Walk.

SAILOR FASHION

The individual places the back of one hand against the center of the back, and palm of the other hand against the front of the body. A glide (slide hop), forward on one foot is taken, then the Roll, and the standing position is regained without removing the hands.

¹Cotterall, B. and D. *Op. cit.*, p. 42.

The stunt may be done by approaching the mat with several glide steps, alternating the positions of the front and back hand on each glide.

JUMP, ROLL

The individual jumps in place and, as the feet strike the mat, immediately springs, and goes into a Forward Roll.

STRIDE JUMP, ROLL

The individual jumps in place, straddling the feet and, as the feet strike the mat, immediately springs, and goes into a Forward Roll.

JUMP, CLAP HANDS, ROLL

The individual jumps in place, claps hands, and as the feet strike the mat, springs, and rolls forward.

JUMP, ROLL MAKING SQUARE

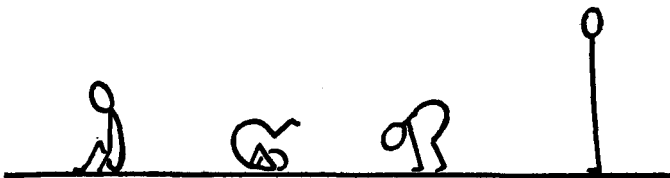
The individual jumps in place, and rolls forward. Upon regaining the standing position, the action immediately is repeated, but during the jump a quarter turn to the left is taken, making the direction of the Roll perpendicular to that of the first one. The action is repeated twice more, making a quarter turn on each jump, so that the individual describes a square with the four Rolls and finishes in the original position.

JUMP, CLAP, ROLL MAKING SQUARE

The above is repeated, clapping the hands on each jump.

B. BACKWARD ROLLS

BACKWARD ROLL



The individual, standing with the back to the mat, sits down with the body close to the feet and head tucked forward. Keeping this relative position, the body immediately is rocked backward onto a rounded back: and shoulders, the hips are lifted off

of the mat, and the arms are swung upward and backward. The body continues to roll off of the rounded back onto the shoulders and during this action the wrists are extended so that the fingers are placed on the mat, thumbs next to the head, and, finally, the entire palm is placed flat on the mat with fingers pointing in the direction the individual was facing at the start of the Roll. As the hands bear the weight, the body is turned over, rolling off of the shoulders and rounded neck. The feet are brought to the floor, a last push is given with the hands, and the individual regains the standing position.

Teaching Suggestions: Emphasize sitting as close to the feet as possible.

"Knees close to chest and head tucked" are two important pointers to give the students. This keeps the knees flexed and the body in a rounded contour, causing it to roll easier, and, also, places the body in the right position to center the weight over the feet after the turn is made.

The Backward Roll does not need a great exertion of strength. In fact, an action of this sort tends to tense the body preventing the relaxed rounded contour from taking shape.

A crooked Roll is the result of variance in the actions of the two arms and hands. Usually the individual takes the weight off of one hand and permits the forearm to touch the mat. This throws the body toward that side, preventing an accurate Backward Roll. Coach the students to place the hands carefully on the mats and to keep the body weight shifted equally between the two hands. In case of inaccuracy, it may be necessary to over correct by carrying the body toward the opposite hand.

The beginner has a tendency to land on the knees rather than on the feet. This can be corrected by pushing harder with the hands, and definitely placing the feet on the mat as close to the shoulders as possible during the Roll. At the end of the Roll, lifting the head and bringing the trunk to an upright position as soon as possible, also, are aids in centering the body over the feet.

During the Roll the beginner is apt to turn the head side-

ward and come out of the Roll on one shoulder. In this case, the hands usually have not been effective in pushing or have not been used accurately.

If not warned, the beginner is apt to pull the muscles in the back of the neck. This happens when the individual "anchors" on the back of the neck near the completion of the Roll. Coach the students to make a complete Roll without stopping until they are on their feet again. This can be accomplished only if the body is kept in a rounded position, and if the direction of the push is accurate. Sometimes students emphasize too much an upward lift or even an upward kicking of the legs and body. The push should be backward with only enough upward movement as is required to carry the flexed knees over the head. An upward kicking motion tends to straighten the legs and arch the back, destroying the rounded contour of the body.

BACKWARD ROLL VARIATIONS 1-14

See Forward Roll variations *Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14.*

15. Backward Roll from Roly-Poly Position

The individual in a sitting position with the feet together, knees well flexed and apart, brings both arms down between the knees, then separates them, the right arm going around behind and to the outside of the right ankle and the left arm around behind and to the outside of the left ankle. The hands are clasped in front of the ankles. In this position a Backward Roll is taken.

16. Backward Roll from a Folded Leg Position

The individual sits on the mat and gets into the folded leg position by placing the left foot as high as possible against the right thigh. The right leg is crossed over the left and the foot placed ~ high as possible on the left thigh. Keeping this position a Backward Roll is taken.

17. Partner Backward Roll

See Couple Rolls, page 162.

C. CONTINUOUS ROLLS

CONTINUOUS FORWARD ROLL

The individual does a Forward Roll, but, instead of coming to a standing; position at the end of the Roll, keeps the body tucked up as the feet are placed on the mat, replaces the hands on the mat, and continues to go into successive Rolls.

Teaching Suggestions: The contour of the body must be kept rounded throughout the Roll with the head tucked. A tendency to lift the head will cause the body to be sprawled forward, usually resulting in a bumped head.

The action of the arms is important for the success of the stunt. The hands should touch the mats only once for each Roll of the body. If the individual permits the hands to touch more than once during a given Roll or drag behind, they will not be in position to receive the weight properly for the next Roll and, again, a bumped head will be the result. Coach the individual to place the hands definitely on the mat for each Roll in an accurate relationship with the feet as in the Forward Roll.

The direction of the push from the feet and hands must be forward.

At first, permit the beginners to take only a few Continuous Rolls at one time, for, if too many are taken, dizziness often results, causing sometimes an unpleasant sensation. Gradually increase the number. Prepare the students for dizziness by coaching them at first not to rise from their last Roll but to remain seated on the mat until their equilibrium is reestablished. Shaking the head often helps to regain it. As the student experiences more Rolls the feeling of dizziness usually is overcome.

Emphasize accuracy before speed in Continuous Rolls.

Variations: A number of variations of the Forward Roll, described on pages 153-155, are possible as Continuous Rolls. In each case, instead of coming to a stand after the first Roll, the original position is held and the Roll continues as long as

desired. Suggested Rolls are Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 17, 20.

CONTINUOUS BACKWARD ROLL

The individual does a Backward Roll, but, instead of coming up to a standing position at the end of the Roll, keeps the body tucked up as the feet are placed on the mat, and immediately rocks backward into another Roll.

Teaching Suggestions: The contour of the body must be kept in a ball shape throughout the action. This will be accomplished if the knees are kept close to the chest and the chin is tucked down on the chest.

Coach the individual to sit down as close as possible to the feet as each Roll is taken. This will prevent a sprawling out of the body.

For each Roll the hands must be placed accurately as in a single Backward Roll.

There must be no anchoring in any position throughout the Roll.

Emphasize accuracy before speed.

CONTINUOUS BACKWARD ROLL FROM ROLY-POLY POSITION

See page 159.

CONTINUOUS BACKWARD ROLL FROM FOLDED LEG POSITION

See page 159.

CONTINUOUS PARTNER FORWARD ROLL

Two individuals stand side by side with inside hands joined and do a Continuous Forward Roll.

CONTINUOUS PARTNER BACKWARD ROLL

Two individuals stand side by side and do a Continuous Backward Roll.

DOUBLE FORWARD ROLL

See page 163.

DOUBLE BACKWARD ROLL

See page 164.

BALL ROLL

See below.

TRIPLE ROLL

See page 165.

D. COUPLE ROLLS

PARTNER ROLLS

Two individuals stand side by side with inside hands joined. Placing the outside hands and the joined inside hands on the mat, they take a Forward Roll.

Variations:

- a. Cross the arms in skaters' position, and do the Roll.
- b. Take the Roll after a run.
- c. Skip forward, roll, and skip forward without breaking the rhythm.
- d. Do a Continuous Partner Roll.

BALL ROLL



No. 2 sits on the mat with knees bent and apart, feet on the mat, close to the body. No. 1 stands in back of No. 2 and, straddling No. 2's shoulders, takes a sitting position on the shoulders, feet touching the floor. No. 2 wraps the arms around the outside of No. 1's knees and clasps the arms in front of the knees. No. 1 leans forward and wraps the arms around the outside and under the knees of No. 2 and clasps the arms. No. 2 rounds the back and tucks the head down to allow No. 1 to proceed. No. 1 tucks the head between No. 2's knees, pushes from the floor with the feet, and starts the Roll forward as close as possible to No. 2. With this initial push the two bodies roll over and over as long as desired.

Teaching Suggestions: No. 2 must be relaxed and ready to roll forward. No. 1's head does not touch the mat in taking the

Roll, but the weight is received on the shoulders and is transferred from there onto the rounded back.

It is essential that the two individuals keep in compact form during the Roll. This is accomplished by keeping the heads tucked down and the two bodies in as rounded positions as possible.

DOUBLE FORWARD ROLL



No.2 lies down face upward on the mat and raises the legs upward. No. 1 stands facing toward -No. 2 with feet in back of No. 2's shoulders. No.1 reaches forward and grasps No. 2's ankles with the fingers on the outside and the thumbs on the inside of the ankles. No. 2 grasps No. 1's ankles with the same kind of a grasp, thumbs on the inside and fingers on the outside of the ankles. As the Roll begins, No. 1 bends over, placing No. 2's feet on the mat in a position so the knees are flexed and separated. As this is accomplished, No.1 springs from the feet, and, bearing the weight on the hands grasping No. 2's feet, tucks the head between No. 2's knees and rolls as close as possible to No.2. As No. 1 rolls over, the pull forward brings No.2 up into No. 1's original position and lands No.1 in No. 2's position. The action is repeated rhythmically with No. 1 doing No. 2's work, described above, and No.2 doing No. 1's work. The complete action is continued.

Teaching Suggestions: With the beginner, insist that No.1 places No. 2's feet on the mat before the spring is taken. This will save many bumped heads. It will slow the action until the correct technique is learned. After the participants have become skilled in the proper use of the body, the spring can come a little previous to the placing of the feet. This permits greater speed in the Roll and a more unified action.

No. 2's knees must be relaxed so No.1 can place the feet on the mat, and the knees must be apart to permit No.1 to

roll between them. Any tendency of No. 1 to roll away from No. 2's body will result in a straightening of the body, a leading of the head toward the mat, and the consequent bumping of the head.

There is no place for speed in the Roll until the proper technique is learned.

DOUBLE BACKWARD ROLL



No. 2 lies down face upward on the mat, with the head toward the length of the mat, and raises the legs upward. No. 1 stands facing No. 2 with back toward the direction in which the Roll is to be taken, feet back of No. 2's shoulders. No. 1 reaches forward and grasps No. 2's ankles, placing the thumbs on the inside and the fingers on the outside of the ankles. No. 2 reaches back and grasps No. 1's ankles, with thumbs on the inside and the fingers on the outside of the ankles. To start the action, No. 1 sits down close to No. 2's head, knees flexed, and immediately lies back on the back lifting the flexed knees and feet upward. At the same time, No. 1 pulls No. 2's legs upward and backward and No. 2 aids the action by supporting the weight on No. 1's ankles and actively rolling over backward until the feet are placed back of No. 1's shoulders. As a result of this combined action, the original positions of No. 1 and No. 2 are reversed. The Roll is repeated rhythmically by No. 1 doing No. 2's work, described above, and No. 2 doing No. 1's work. The complete action is continued.

Teaching Suggestions: It is very important that No. 1, upon lying backward, lifts the legs in the air with knees bent, and keeps the feet in contact with No. 2's shoulders. As No. 2 comes out of the Backward Roll, the weight is supported by these legs. If they are not lifted, No. 2's body will be sprawled out, making it impossible for the standing position to be gained. The desired action can be accomplished better if No. 1 will con-

centrate on keeping the feet close to No. 2's shoulders. This can be done easier if No.1 sits down close to No. 2's shoulders.

The pull exerted by No.1 on No. 2's legs must be directed upward and backward until No. 2's feet are placed accurately on the mat in back of, and close to, No. 1's shoulders. If No.1 makes the mistake of pulling directly backward with decidedly flexed elbows, No. 2's feet will travel in a plane parallel to the floor and, as a result, No.2, instead of rolling over, will slide along the mat.

The contour of the two bodies should present a rounded surface as contact is made with the mat. This is accomplished by flexing the knees, rounding the back, and keeping close together.

E. GROUP ROLLS

TRIPLE ROLL



No.2 lies down face upward on the mat with knees flexed and separate~ No.1 stands facing No.2 with feet in back of No. 2's shoulders, and No.2 grasps No. 1's ankles with thumbs on the inside and fingers on the outside of the ankles. No. 3 stands in a stride position over No. 2's body, and, bending forward, grasps No. 2's ankles, thumbs on the inside and fingers on the outside of the ankles. No. 1 leans forward and lifts No. 3's legs by placing the hands in a position with the palms against the front of the legs, thumbs on the inside and fingers on the outside of the ankles. The Roll begins by No. 1 pushing No. 3's legs forward at the same time that No.3 ducks the head between No. 2's knees. As No.3 is carried over into the Roll, No.1 springs from the feet, and, supporting the weight on No. 2's ankles, is carried forward until No. 3's feet can be placed on the mat. No. 1's spring forward brings No. 2 to a stand. The action is continued rhythmically by No. 2 springing for-

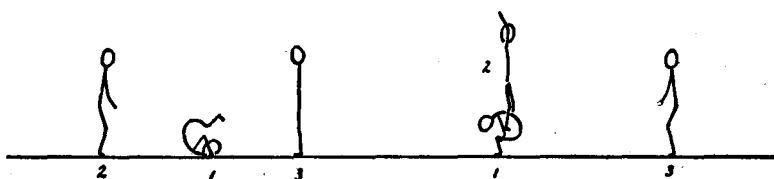
ward, No. 1 going into the Roll, and No. 3 coming to a stand. The action is continued.

Teaching Suggestions: No.3 must do the Forward Roll as close to No. 2's body as possible in order that the distance which No.1 must cover before the Roll is taken may be shortened. This can be accomplished if No. 2's knees are flexed sharply.

The knees must be kept relaxed in order that the feet can be placed on the floor easily.

Participants should be coached to bear the weight on the feet of the other individual, which they are placing on the floor, in order that the head may be tucked well.

TRIPLE JUMP ROLL



No.1 stands in front of, and about a body's length away from, No.3, both facing the center of the mats. No. 2 stands opposite **No.1**, a body's length away and facing Nos. 1 and 3.

No. 1 starts the action by doing a Forward Roll toward No.2. As No. 1 approaches the tuck-up position in the Roll, No.2 takes a straddle jump over No. 1's body, landing on both feet, placed together, and immediately takes a Forward Roll toward No.3. In the meantime, No. 1 rises from the tuck-up position, turns around and faces the participants. No.3 takes a straddle jump over No. 2's body and rolls toward **No.1**, who now is in No. 2's original position. No.1 continues the action by taking a straddle jump over No. 3's body and rolling toward No. 2 who, in the meantime, has risen from the Roll and is in No. 3's original position. The action is continued as long as desired.

Teaching Suggestions: Progressive steps may be used in the teaching of the stunt as follows:

1. Straddle Jump

To execute the straddle jump properly the individual springs upward and forward from both feet, separating the legs wide and raising them sideward with the knees straight. The landing is made on both feet placed together about three feet from the spot where the spring was made. A common fault which individuals make in taking the straddle jump over a body is to jump from one foot and swing the other leg over the body. It is essential, therefore, in order to establish the correct habits, to emphasize springing from both feet and raising each leg equally sideward, landing on both feet at the same time. Coach the individuals to use the arms to aid in getting the necessary height and distance forward in the jump.

2. Straddle Jump Over Stationary Body

- One individual, facing the jumper, takes a deep squat on the mat, with hands around the knees, head tucked down on the knees, and back rounded, as in the tuck-up of the Forward Roll. Other individuals straddle jump over the stationary body.

3. Straddle Jump, Forward Roll

There is need for the student definitely to coordinate the action between the landing from the jump and the push for the Roll. The beginner has a tendency to rush into the Roll without the necessary control. Emphasize a balanced and definite landing on both feet, followed by a push from both feet into a controlled Forward Roll.

4. Straddle Jump Over Stationary Body, Forward Roll

5. Straddle Jump Over Rolling Body

No.1 stands facing No.2, a body's length away. No.2 does a Forward Roll toward No.1. As the tuck-up position is taken by No.2, No.1 takes a straddle jump over the body of No.2 and proceeds into a Forward Roll.

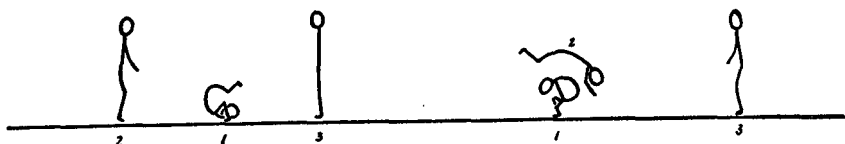
6. Triple Jump Roll

Coach the individuals when doing a Forward Roll to keep the head down as the tuck-up position is taken. If necessary.

it may be tucked between the knees. It is essential that each individual rises from the tuck-up position and turns around as soon as possible after another member has taken the straddle jump over the body, in order to be ready to continue the action of the stunt.

Work for accuracy first so that every part of the stunt may be perfected. Gradually increase the speed of action when control has been learned.

SHUTTLE ROLL

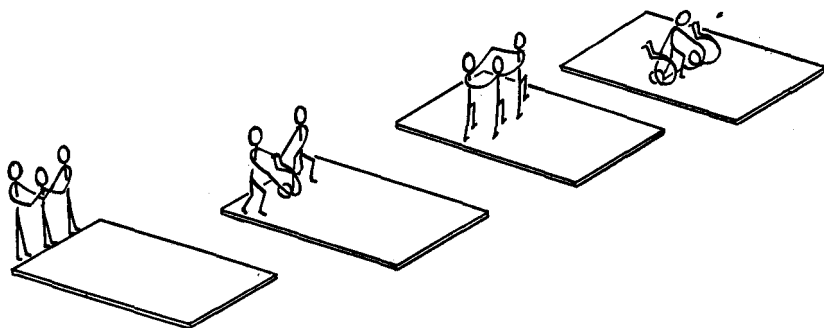


Nos. 1, 2, and 3 take positions as described in the Straddle Jump Roll. The action is similar to that in the Straddle Jump Roll, except that, as the rolling body approaches, the individual dives over the body and goes into a Forward Roll.

See Dive Over Kneeling Individuals, page 175.

Teaching Suggestions: Before the complete stunt is taken, have the participants dive over a stationary body sitting in a position similar to that at the end of the Forward Roll. Follow this by diving over a rolling body, just as the tuck-up position is reached.

TRIPLE FORWARD ROLL, SKATERS' POSITION



Three individuals stand side by side a short distance from the mats. No. 1 is at the right, No. 2 in the middle, and No. 3

at the left. Preferably, the middle one should be smaller than the outside ones. Hands are grasped in the skaters' position as follows: No. 2 with the right hand grasps the right hand of No.1, and with the left hand grasps the left hand of No.3. No. 1 with the left hand grasps the right hand of No. 3 in front of No. 2's body.

The individuals skip forward to the mats and No.2 springs from both feet, bends forward over the joined hands of Nos. 1 and 3, and does a Forward Roll. Nos. 1 and 3 continue to skip forward to keep up with No.2. At the end of the Roll, Nos. 1 and 3's joined hands are in back of No.2. All three continue to skip forward, Nos. 1 and 3 slightly passing No.2, at the same time raising the joined hands with a high arc movement over No. 2's head to a position in front of No. 2's body. Nos. 1 and 3 now do a Forward Roll, and No.2 skips forward to keep even with them. At the end of the Roll all three are in the original position in relation to each other.

Teaching Suggestions: With practice the three individuals can become skillful in doing the stunt rhythmically so that there is no break between the rolls and skips.

Each Roll is preceded by a spring from both feet. The three individuals should decide what foot shall be used to start the skip.

TEAM ROLLS

The Rolls in this section, not only offer opportunity for team work, but also contribute to the perfection of the Forward and Backward Roll in regard to timing of the Roll and accuracy in direction. Members of the team are standing side by side and have a certain amount of space in which to roll. Beginners doing the Team Roll for the first time are put to the test of cooperating with other members upon a signal, and controlling their Rolls so that they are done accurately in the amount of space allotted them.

1. Team Roll from One Side of the Mats

A number of individuals, standing side by side, do a Forward Roll in unison upon a given signal.

Teaching Suggestions: Give the students opportunity to count for the Rolls. Chords may be substituted for the counts. Unified action may be gained easier if the following counts are given in the proper rhythm:

1. Place the hands on the mats.
2. Roll forward.
3. Regain standing position.

2. Alternate Team Roll from One Side of the Mats

The members of the team count off by twos as they stand side by side. Upon a given signal, the number ones roll forward and come to a standing position on the other side of the mats. At a second signal, number twos roll forward and come to a standing position in the spaces between number ones.

3. Team Forward and Backward Roll from One Side of the Mats

A team lines up at the edge of the mats with every other individual standing with their backs to the mats. At a given signal, the team rolls in unison, those facing forward doing a Forward Roll and those facing backward doing a Backward Roll. The action is repeated across the mats, the members reversing their original Roll.

4. Two Teams Roll from Opposite Sides of the Mats

Team No. 1 lines up on one side of the mats, the members standing with a space between each, large enough for another individual. Team No. 2 lines up on the opposite side of the mats in the same manner, but in such a way that the members' are standing opposite the spaces in No.1's team. At a given signal, both teams roll forward passing each other in the middle of the mats and come to a stand on the opposite side with backs to the mats.

5. One Team Forward, One Team Backward, Roll from Opposite Sides of the Mats

Team No. 1 lines up on one side of the mats facing the mats with a space between each member large enough for an-

other individual. Team No. 2 lines up on the other side of the mats with backs to the mats, each member opposite the spaces on No. 1's team. At a given signal, the teams roll in unison, team No. 1 rolling forward, and team No. 2 backward. The action may be repeated, team No. 1 rolling backward, team No. 2 rolling forward.

6. Tearn Roll, Jump, Turn

The members of the team line up at the edge of the mats. At a given signal, the team rolls forward. As the standing position is gained, the members jump in the air making a half turn to the left, and immediately roll forward again. Once more when the standing position is gained, the jump and half turn are made, bringing the members to their original positions. The action may be repeated if desired.

The complete action should be done in a definite rhythm. Chords or other proper rhythmic accompaniment may be used to set the rhythm.

7. Team Roll, Clap, Jump, Turn

The members of the team line up at the edge of the mats. At a given signal, the team rolls forward, and as the standing position is gained the members clap their hands. Immediately a jump is taken in the air making a half turn to the left. The action is repeated across the mats to the original positions and may be continued as long as desired.

The rhythm is important to bring about unified action.

8. Two Teams Roll, Jump, Turn

Two teams line up on opposite sides of the mats and, at a given signal, repeat in unison the action of No.6.

9. Two Teams Roll, Clap, Jump, Turn

Two teams line up on opposite sides of the mats and, at a given signal, repeat in unison the action of No.7.

10. The Scale

Eight members stand side by side at the edge of the mats, ranging in size with the shortest members at the right, repre-

senting the notes of the musical scale. The greater the range in height the better. As the scale is played, Nos. 1, 2, 3, 4, 5, 6, 7, 8 roll forward in turn responding to the notes of the scale.

The scale may be run down by Backward Rolls, No. 8 starting the action.

11. Roll by Couples from Line

An uneven number of members line up as a team at the edge of the mats with the tallest member in the center and the members on either side graduating in height with the smallest at the ends, arranged so that the two sides are symmetrical. At a chord or other rhythmic sound, the center rolls forward. At a second sound, the member on each side of the center rolls forward; at a third signal, the second member on each side of the center rolls forward. This is repeated until all the members on each side of the center have rolled forward and the team is in its original line-up but on the opposite side of the mats.

12. Team Progressive Rolls

At each end of the line of mats a team lines **4fip** with the members standing one behind the other. At a given signal, Nos. 1 in both lines do a Forward Roll at the edge of the mat. They then skip forward to the center of the mats and Nos. 2 step to the edge of the mats. All four then do a Forward Roll, Nos. 1 side by side in the center of the mats and Nos. 2 at the edge of the mats. Nos. 1 skip forward to the farther edge of the mats, Nos. 2 skip to the center, and Nos. 3 step to the edge of the mats. All six then do a Forward Roll, Nos. 1 and 3 side by side at the edge of the mats, and Nos. 2 side by side in the center. As the members reach the opposite end of the mats, they go to the end of the line and the front members step up in turn to keep the action going. Usually the action is continued until each member is back in the original line-up.

13. Progressive Rolls in Square

Nos. 1, 2, 3, 4 take a position on the mats as if standing at four corners of a square, facing in a counterclockwise posi-

tion. Each does a Forward Roll, and upon regaining the standing position jumps in the air making a quarter turn right. Each then does a Backward Roll, jumps, and makes a quarter turn right. They repeat the Forward and Backward Roll as described above, completing the square.

CHAPTER VIII

DIVES

DIVING is classified into two types: (1) diving for distance; (2) diving for height.

The technique of the Dive involves consideration of five elements: (1) the approach; (2) the take-off, or spring; (3) the flight of the body through the air; (4) the landing on the hands; (5) the rolling of the body to an upright position.

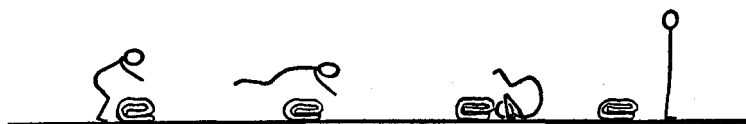
The amount of speed to be put into the approach depends upon the distance or the height to be covered in the Dive. The greater the distance or height the more speed is required.

The take-off includes a jump onto both feet, followed by a spring from the floor. The jump should be taken close to the obstacle over which the dive is to be taken. The direction of the push from the feet in the spring is such as to carry the body both upward sufficiently to clear the obstacle, and forward to cover the required distance. As the jump and spring are taken, the inclination of the body is an important factor in obtaining the correct direction in the Dive. The ankles, knees, and hips are bent as the individual lands onto both feet in the jump, and, as the spring is taken, these joints straighten, thus, contributing to the force needed in the dive. The amount of push from the feet depends upon the distance or height to be covered. It is essential that the spring is taken from a firm surface in order to get the maximum amount of return thrust from the jump.

As the spring is taken the arms aid in giving impetus to the body by swinging forward, the intensity of the swing depending upon the distance or height to be covered. During the flight of the body the arms remain in this extended position and the body is stretched out with the head held up or in line with the body.

At the end of the Dive, the hands come in contact with the mat first, and they receive the weight of the body for a fraction of a second. Then the head is tucked, the body rounded, and the elbows are bent, permitting the body to roll onto the shoulders and rounded back, as in the Forward Roll, until the standing position is gained. The correct timing of the tucking of the head is essential for a successful Roll. If it is tucked too soon, it shortens the distance which the body is permitted to cover. If it is tucked too late, a bumped head is the result.

DIVE OVER ROLLED MAT



Perfection of this stunt serves as a good basis for progression to Dives over individuals. A mat is rolled and placed cross-wise at the near end of the floor mat. The individual, standing three or more yards away from the mat, runs forward and, when in a position directly behind the rolled mat, jumps onto both feet, springs, dives over the mat, and goes into a Forward Roll, finishing in a standing position.

DIVE OVER KNEELING INDIVIDUALS



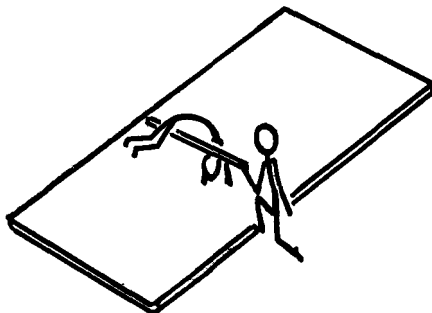
For beginners, it is feasible to have the individual who is kneeling, to take as Iowa position as possible on the mat. This is accomplished by tucking the knees well under the body and resting the forearms on the mat.

As skill is gained in the Dive, the kneeling individual may take a position with the hands on the mat and the upper legs at right angles to the body. This makes a higher obstacle over which the individual dives.

After the Dive has been perfected over one body, more in-

dividuals may be placed on the mat side by side, over which the Dive for distance may be taken.

DIVE OVER WAND



A wand is held in a horizontal position the desired distance from the floor, depending upon the ability of the diver. The action is the same as that described for the Dive over a kneeling individual, except that after the jump is taken, the body is kept in an upright position so that the spring is taken directly upward. Then, bending the hips sharply, the body is carried downward and forward over the obstacle with the hands reaching to receive the weight. The landing and subsequent Roll is the same as the Dive over the individual.

DIVE THROUGH SPREAD LEGS



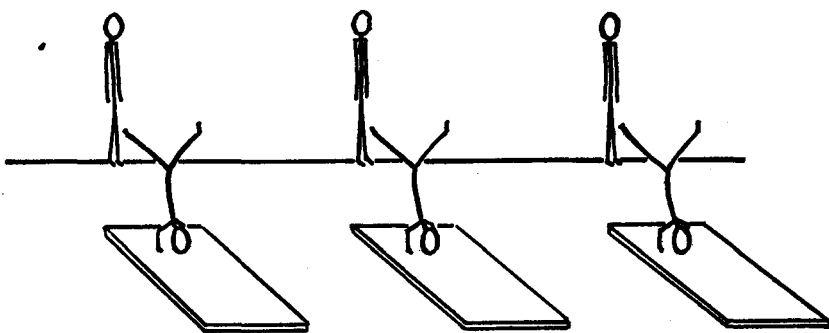
No.1, standing at the end of a row of mats, does a Headstand, and, when the balance is gained, straddles the legs widely sideward. **No.2**, the diver, runs forward and upon reaching **No.1**, springs from both feet and dives through the spread legs, finishing in a Forward Roll.

Teaching Suggestions: The Headstander should have the front part of the body toward the approaching diver. In this position, the headstander can go into a Forward Roll if the diver causes a loss of balance.

This stunt should be preceded by practice of diving over the wand for height. See page 176.

The diver should take just a few steps' start as the dive is for height rather than for great distance. Therefore, the spring should direct the body upward with enough forward movement to clear the obstacle. The spring must be taken from both feet. The diver must carry the arms forward in order that the hands will receive the weight. .

TEAM DIVE THROUGH SPREAD LEGS

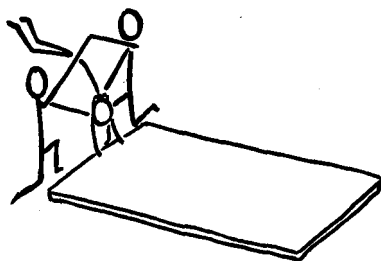


Three or more individuals stand facing the front with a distance of three feet between each. They do the Headstand and, at a given signal, straddle the legs. About four yards behind each headstander stands a diver. At a signal, the divers run forward and dive through the legs of the headstanders and do a Forward Roll.

DIVE OVER BODY AND THROUGH LEGS

No. 1 kneels on hands and knees across the end of a long row of mats. At a distance of about four yards from No. 1, No. 2, with back to No. 1, does a Headstand and straddles the legs sideward. No. 3, the diver, runs forward, dives over No. 1's body and goes into a Forward Roll. Upon regaining the standing position, No. 3 continues to run forward, dives through the spread legs of No. 2 and goes into a Forward Roll.

DIVE THROUGH THE LOOP

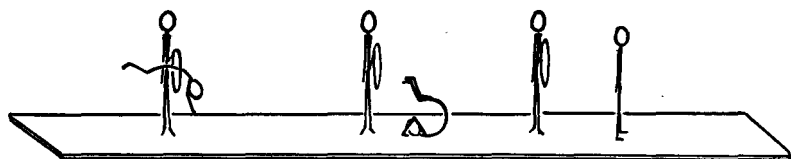


Nos. 1 and 2 stand opposite each other across one end of the mat. No.1 kneels on the right knee, keeping the lower left leg at right angles to the floor. No.2 kneels in like manner on the left knee. They grasp hands and separate the joined arms so as to form a loop by lowering the arm on the side of the bent knee, and raising the arms on the side of the leg kneeled upon.

A third individual approaches the formation, dives through the loop and goes into a Forward Roll.

Variations: More loops may be added by individuals kneeling side by side of the original two and joining hands with those on the opposite side of the mat.

DIVE THROUGH HOOP



One individual holds a hoop, twenty-seven to thirty-six inches in diameter, two feet from the ground. A second individual runs forward, dives through the hoop, and goes into a Forward Roll.

Teaching Suggestions: The larger size hoop should be used at first until the individual has conquered any fear of passing through the obstacle. Stress should be placed on springing from both feet, and landing on the hands to support the weight before the Roll is taken.

The hoops may be made of wood or wire. Care should be taken to have smooth material to avoid splinters if the wood is used, or to avoid sharp edges if the wire is used.

For demonstration purposes, the hoops will show better if they are wrapped in bands of two contrasting colors.

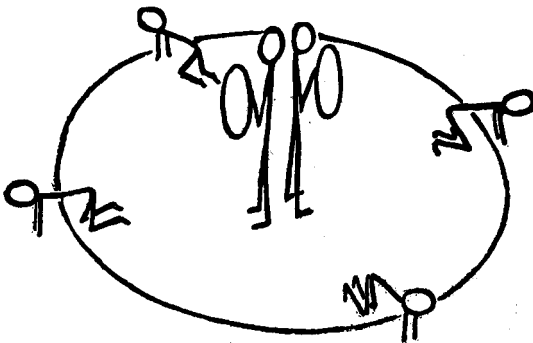
Variations:

1. Graduate the size of the hoops to be dived through.
2. Dive through two or more hoops of the same size.
3. Dive through two or more hoops of graduating sizes.
4. Cover the space within the hoop with thin paper, and dive through.

DIVE THROUGH HOOPS IN CIRCLE

Four or five individuals stand in a circle facing outward, each holding a hoop about three feet in diameter. A diver stands a few feet from each hoop and, at a given signal, runs forward, dives through the hoop, and does a Forward Roll. Each then runs toward the next hoop and repeats the act. This is continued until each diver returns to the original hoop. Each diver dives through the original hoop; the holders toss the hoops in the air catching them, and the divers reverse their direction and go around the circle again, diving through the hoops.

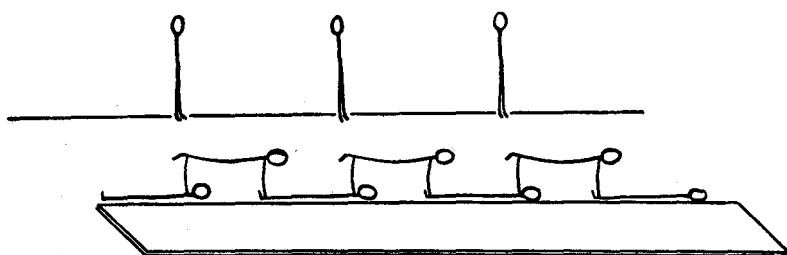
DIVE THROUGH HOOPS AND OVER BODIES



Four or five individuals stand in a circle, facing outward, and kneel on hands and knees. **In** the center of the circle, two individuals stand back to back, each holding a hoop, about three.

feet in diameter. A diver stands a few feet from each hoop and kneeling person. At a given signal, the divers in the outer circle dive over the kneeling bodies' and do a Forward Roll, then advance, repeating the action until they get back to their original position. In the inner circle the divers dive through the hoops in unison with those of the outer circle, do a Forward Roll, and advance. They repeat their action until the divers in the outer circle are back to their original positions.

DIVE OVER SUPPORTED BODIES



A. *Straight Line Formation*

Nos. 1, 3, 5, and 7, all facing in the same direction, lie down on their backs at the side of long mats with their bodies in a straight line with each other, and with a distance of about three feet between each. Keeping the elbows on the floor, they raise the forearms upward, and flex the wrists so the palms are upward in a horizontal position with the floor. No. 2 stands in the space between Nos. 1 and 3, No. 4 stands between Nos. 3 and 5, and No. 6 between Nos. 5 and 7. No. 2 bends forward and places the hands on No. 1's legs near the ankles or on the floor at the side of the legs. Supporting the weight on the hands, No. 2 extends the legs back toward No. 3 and places them in No. 3's hands. No. 3 extends the arms upward, raising No. 2's legs until No. 2's body is in a horizontal position. During this time No. 4 takes the same position with Nos. 3 and 5; and No. 6 does likewise with Nos. 5 and 7.

At a distance of about four yards, Nos. 8, 9, and 10 stand in a front line, each directly in line with one of the supported

bodies. At a given signal, they run forward and dive in unison over Nos. 2, 4, and 6, and go into a Forward Roll.

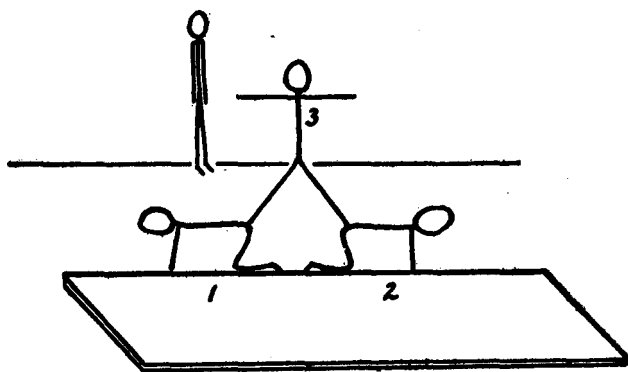
Variation: Any number of supported bodies may be used. A column of divers may be formed by having a file behind each of the supported bodies. As soon as the first one in each file has run forward and dived, the action is repeated by the next ones in line acting in unison. However, the bodies could not be supported for too long a time.

B. Circle Formation

Four groups of three individuals in the following formation mark off quarters of a circle: No. 1 in each group lies down with the head toward the center of the circle; No. 3 lies down at No. 1's feet at a distance of one yard with the body in a straight line with No. 1; and No. 2's body is supported by Nos. 1 and 3, as described in A.

The dive over the bodies may be done either by one diver, who progresses around the circle, or by four divers, each of whom lines up a short distance from the respective formation and, upon a signal, dives in unison with the others. The four may progress around the circle until all are in their original positions.

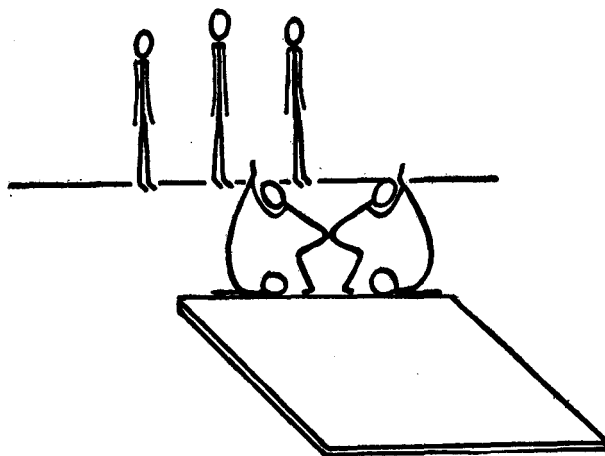
DIVE THROUGH ARCH



No. 1 and No. 2 stand back to back with the side of their bodies toward the length of the mat, and kneel on hands and knees. No. 3 mounts to a straddle stand by placing one foot on

the broad part of No. 1's lower back and the other foot in like manner on No. 2's back. No. 4, the diver, runs forward, dives through the arch made by No. 3 standing in a straddle stand on the bodies of Nos. 1 and 2, and goes into a Forward Roll.

DIVE THROUGH FORMATION



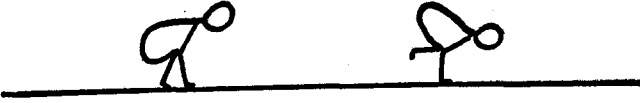
No. 1 and No. 2 stand back to back and lower their trunks forward, keeping the backs flat. No. 3 lies down on the back with head toward No. 1's feet and No. 4 takes the same position with No. 2. Nos. 3 and 4 raise the legs and hips in a semi-shoulder rest position and Nos. 1 and 2 grasp their ankles, respectively. This formation makes three openings for Dives, namely, the space between the lowered backs of Nos. 1 and 2, and the spaces made by the bodies of Nos. 1 and 3, and 2 and 4. Three divers from a distance of three or four yards away run forward and dive through the openings and do a Forward Roll in unison.

Teaching Suggestions: To make the stunt easier for the middle diver have Nos. 1 and 2 bend their knees. The outer divers do more of a Forward Roll from a run than a true Dive.

CHAPTER IX

BALANCES

THE TIP-UP

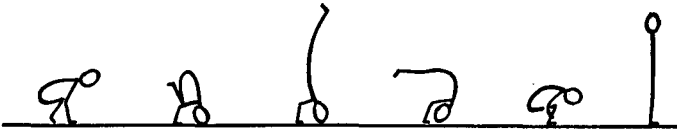


THE individual squats down with knees spread and, bringing the arms down between the knees, places the hands on the mat in front of the feet, shoulder width apart, fingers pointing straight forward. Bearing the weight on the hands and placing the knees on the arms above the elbows, the individual leans forward with head raised until the feet are lifted from the floor and the weight of the body is balanced on the hands.

HEADSTANDS

In the Headstand, the weight of the body is supported over a triangle formed by placing the head on the mat at the apex and the two hands at the base angles.

1. Headstand from Tip-Up Position



From the Tip-Up position the body is carried on forward until the front part of the head, close to the hair line region, is placed on the mat in the position of forming the apex of the triangle with the hands. The legs then are lifted upward by extending first the hip joint and finally the knee and ankle joints until the legs are in a straight line with the rest of the

body. The final position is reached by arching the back slightly until the feet are in a line with the head so the body is held in a true balance that can be kept indefinitely.

The descent from the Headstand is made by tucking the head so the chin is close to the chest, flexing the hips and taking a Forward Roll onto a rounded back.

Teaching Suggestions: If the individual is standing at the edge of the mat, the hands should be placed close to the edge when the squat position is taken. The farther away from the feet the hands are placed, the more difficult it is to invert the body into a perpendicular line with the floor.

The proper placement of the head is important. If it is placed in a line with the hands, it will be necessary to balance the body over a straight line rather than over a triangle which is a much more difficult feat. If the top of the head is placed on the mat, there is a tendency for too much weight to be placed on the head and a true balance between the head and hands will not be gained. If the head is tucked so the weight is placed on the back part of it, the individual will roll over.

Keeping the knees flexed and close to the body as the hips are extended will make the lifting of the legs much easier, because the weight of the legs will be kept closer to the center line of the body. This is in keeping with the principle that the closer to the center line of the body the weights of the different members are carried, the easier are they moved. Check any tendency of the beginner to stretch out the legs horizontally while lifting them upward.

It is difficult to gain balance through quick jerky movements. Therefore, coach the students to make each movement smoothly and avoid any kicking of the legs into position.

At first the beginner may experience the feeling of having no power at all to lift the legs from the Tip-Up position, but strength and ability to do so increases by patient practice.

It is essential that beginners are coached how to descend properly from the Headstand position before they attempt the activity. Demonstration of the proper technique is most helpful at this time. If the correct way is not shown, the usual method

taken by the beginner is to pivot on the head, arch the back and swing the legs over landing the feet and back heavily on the mat, or extremely arching the back.

2. Headstand, Kicking Legs Into Position

The individual squats down, placing the head and hands on the mat in the form of a triangle. First one leg, then the other, is kicked up into position, thus, inverting the body. As both legs reach the final position, the back is arched slightly and the toes are extended.

It is more difficult to catch the balance with this method as the act of kicking the legs is apt to throw the body out of line. However, some individuals find this easier to overcome than to attempt to straighten the legs up after the body is inverted in the Tip-Up position.

3. Headstand, Lifting Extended Legs

The individual stoops down placing the head and hands on the mat in the proper position for the Headstand. Keeping the knees practically extended, both legs are lifted upward until the final position is gained.

This method requires considerable strength and, therefore, is not feasible for beginners.

4. Headstand from Lying Down Position

The individual lies face downward on the floor with the face on the mat about a foot from the edge, and the palms placed on the mat in front of the shoulders, fingers pointing forward. Bearing the weight on the hands, the body is pulled forward by raising and flexing the hips letting the legs remain straight with the feet dragging on the floor. As soon as possible, the front part of the head is placed on the mat in proper triangular relationship with the hands, and when the legs, with knees straight, have been brought to the closest possible position toward the arms, they are lifted slowly upward into the Headstand position.

5. *Headstand from a Folded Leg Position*

From a sitting position on the mat, the individual takes hold of the left foot and places it as high as possible on the right thigh, then crosses the right leg over the left and places the right foot as high as possible on the left thigh.

From this folded leg position, the individual may proceed into a Headstand in either one of the following ways:

- a. The individual rocks forward onto both knees, then placing the hands on the mat, goes into a Tip-Up position by raising both knees to rest on the bent elbows. The folded legs then are lifted to a Headstand balance.
- b. The individual rocks forward onto both knees, and, placing the head and hands on the mat in a triangular position without unfolding the legs, raises one knee onto one bent elbow, and then the other knee onto the other elbow. From this position the folded legs are lifted to a Headstand balance.

The descent from the Headstand may be made by a Forward Roll, or by coming back into the starting position through the Tip-Up position.

Variation: After the Headstand is gained, unfold the legs and extend them upward to a full Headstand balance. The descent may be made by a Forward Roll, or through the Tip-Up position.

HEADSTAND VARIATIONS

1. *Headstand, Moving Legs*

After the Headstand position is taken, the individual may move the legs in the following ways:

- a. Spread the legs sideward and return.
- b. *Move* the left leg from the hip forward, and the right leg backward. Scissor the legs back and forth.
- c. Combine a and b.
- d. Clap the feet together.
- e. Cross the ankles and uncross them several times.
- f. Flex one knee and place the sole of the foot against the front part of the other leg near the knee.

- g. Make a bicycle motion with the legs.
- h. Descend from the Headstand into the Tip-Up position, and lift the legs once more into the Headstand position.
- z. Flex the hips and lower both legs to a horizontal position with the floor with knees straight. Keeping the legs straight, lift them to the original position.

2. Headstand, Moving Arms

After the Headstand position is taken, the individual may move the arms in the following ways:

- a. Lift the right hand and replace.
- b. Lift the left hand and replace.
- c. Slap the floor with one hand and replace.
- d. Clap the hands and replace.

3. Moving Base of the Headstand

a. Turning in circle:

After the Headstand position is taken, the individual pivots on the head, and by moving the hands one at a time progressively turns the body completely around.

Teaching Suggestions: During the turning, the relationship of the hands and the head in a triangular position must be kept as nearly as possible to insure a firm and efficient base.

The correct relationship of the body and head should be kept throughout the turning. That is, as the head is turned the whole body turns accordingly so that at no time, as the pivot is taken on the head, is the head twisted in relation to the body. In order to maintain this proper relationship between the head and body, the neck is kept firm.

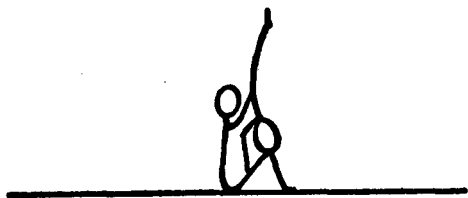
During the turning, there should be small movements of the hands and head. Every movement should be under control.

b. Moving forward:

After the Headstand position is taken, the individual may progress forward in relation to the starting position. This is accomplished by pushing the head slightly forward and then moving the hands the same amount of distance. The action is continued as long as desired.

Teaching Suggestions: A firm smooth surface is essential for the progression. Small movements must be made by the head and hands. The head is slid along the floor and the hands push and advance.

HEADSTAND IN PARTNER'S LAP, FACING INWARD



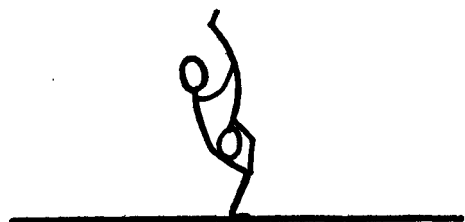
No. 1 sits down with knees bent and apart, and feet flat on the floor. No. 2, facing No. 1 places the hands on No. 1's knees and the head in No. 1's lap and lifts the body into a Headstand position. No. 1 places the hands on No. 2's waist.

HEADSTAND IN PARTNER'S LAP, FACING OUTWARD



No. 1 sits down with knees bent and feet flat on the floor. No. 2, facing outward, straddles No. 1's legs, and, placing the hands on No. 1's thighs and the head on No. 1's knees, lifts up into a Headstand position. No. 1 places the hands on No. 2's waist.

HEADSTAND HELD BY STANDING PERSON



No. 1 stands in a stride position, knees bent. No. 2 facing

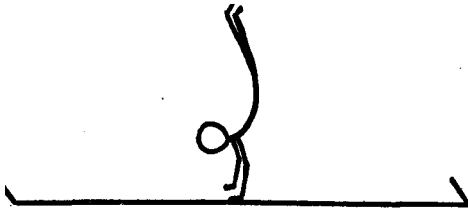
No.1, places the hands on No. 1's knees and the head on No. 1's thighs and lifts into a Headstand. No. 1 places the hands at the side of No. 2's body.

FOREARM STAND



The individual places the forearms on the mat, shoulder width apart, palms down. Supporting the weight of the body on the arms, in this position, the legs are kicked upward until the body is in a balanced inverted stand. The push of the body must be upward from the mat and the head lifted to accomplish the stunt.

HANDSTAND



The individual stands with one foot in front of the other and places the hands on the floor. Supporting the weight on the hands, the legs are kicked upward until the body is inverted and balanced in an arched position with the head lifted and the toes pointed.

Teaching Suggestions: The emphasis should be upward rather than down. This is gained by a strong lift through the chest muscles away from the floor. The head must be bent far back to aid in the balance.

The individual should be taught the proper technique of coming down from the Handstand. The easiest way is to let the feet down in the same direction in which they were carried up.

If the balance is carried too far forward causing the body to descend, the weight can be shifted to one hand so the body is twisted around and the landing made first on the foot on the same side as the hand supporting the weight and then the other as in the Cartwheel.

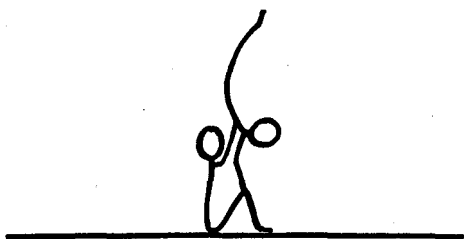
HANDSTAND ON KNEES



No.1 lies down with the knees flexed and feet flat on the mat. Stepping in between No. 1's feet, No.2 places the hands on No. 1's knees with the fingers pointing towards No. 1's feet. No. 1 reaches up toward No.2, and No.2 leans forward until the arms are straight and the shoulders are placed against No. 1's hands. No.2, with the weight supported on No. 1's knees and hands, throws the feet up into a Handstand position.

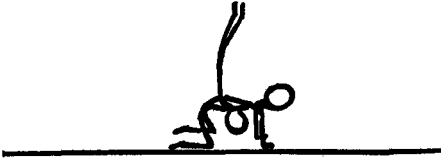
Teaching Suggestions: No.2, in taking the position with shoulders against No. 1's hands, must lean forward enough to be able to straighten the arms. Raising the head as the Handstand position is taken is essential to obtain the balance.

HANDSTAND ON KNEES, FACING OUTWARD



No.1 sits down with knees bent and feet flat on the floor. No.2 straddles No. 1's legs and, placing the hands on No. 1's knees, does a Handstand. No. 1 places a hand on each side of No. 2's trunk.

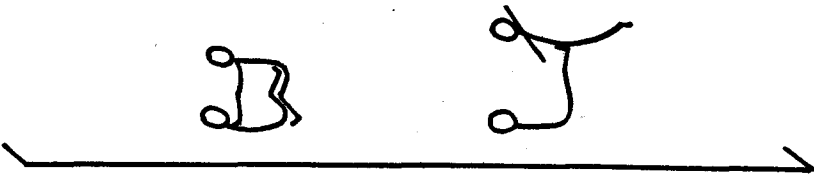
CHEST BALANCE ON BACK



No.2 kneels on hands and knees crosswise of the mat. No.1 stands facing the left side of No. 2 and, reaching downward, takes hold of the upper part of No. 2's left arm with the left hand, fingers pointing downward, and the upper part of No. 2's left leg with the right hand, fingers pointing downward.

Bracing with the hands, No.1 bends forward until the head is on the opposite side of No. 2's body. With a spring No.1 throws the legs upward until a balanced position is obtained. Descent is made by bringing the feet down in the original position.

SWAN BALANCE



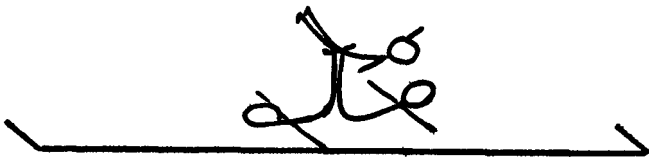
No.1 lies down on the mat on the back, and raises the legs upward to forty-five degrees or more. No.2, facing **No.1**, leans over, placing the soles of No. 1's feet against the abdomen along the hip line region, and grasps No. 1's hands which are extended fore outward. When the balance position is to be gained, No.2 gives a slight spring from the feet and No. 1 extends the legs upward until they are in a perpendicular position, carrying No. 2's body into a horizontal position. No. 2 takes a swan balance position by arching the back, lifting the head, extending the feet, and raising the arms sideward.

SWAN BALANCE, FACING OUTWARD



No. 1 lies down on the mat on the back, and raises the legs upward, knees bent slightly. No. 2, facing No. 1's feet, straddles the body. No. 2 places the soles of No. 1's feet against the abdomen near the hip line region. No. 2 springs from the floor and No. 1 extends the legs upward lifting No. 2's body upward into a horizontal position. No. 2 takes a swan position by arching the back, extending the feet, lifting the head, and raising the arms sideward.

SWAN BALANCE ON FEET OF TWO INDIVIDUALS



No. 1 lies on the back on the mat. No. 2, facing in the opposite direction, lies down on the back at the side of No. 1 with hips even with No. 1's hips. Both raise the legs upward with the knees straight. When this is done, No. 2 slides over and gets in line with No. 1's body, so that the extended legs are in line with each other and the heels touch.

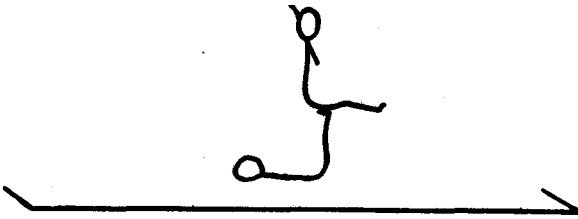
No. 3, the top mount, stands at the side of the feet. Nos. 1 and 2, keeping the heels together, lower the legs by bending the knees until the feet are at the correct mounting height for No. 3. No. 3 bends over the feet placing the abdomen near the hip line on the soles. At a given signal, No. 3 pushes lightly from the floor, and Nos. 1 and 2 straighten the legs upward until they are in a perpendicular line with their bodies, thus raising No. 3 in the air. No. 3, balancing on the soles of the feet, takes

a swan position by arching the back with head and chest up, toes pointed, and arms sideward.

At the conclusion of the balance Nos. 1 and 2 bend the knees and lower No.3 until the feet can be brought to the floor and the standing position regained.

Teaching Suggestions: Nos. 1 and 2 should flex the ankles so the soles of the feet will be as horizontal as possible with the floor, thus, making a flat surface upon which No. 3 balances. No.3 may hold to the supporting legs or feet until the balance is gained, then raise the arms sideward.

SITTING BALANCE, FACING OUTWARD



No.2 lies down on the mat on the back and raises the legs to about forty-five degrees. No.1 stands with back to No. 2's legs, and places the soles of No.2's feet against the thighs, taking a semi-sitting position. No.1 reaches the hands back and grasps No. 2's hands which are raised upward. No. 1 gives a slight spring from the floor and No.2 raises the legs upward to a perpendicular position. By this action No. 1 is brought to a sitting position with back straight and legs extended straight in front. As soon as the position is steady, No.1 raises the arms sideward.

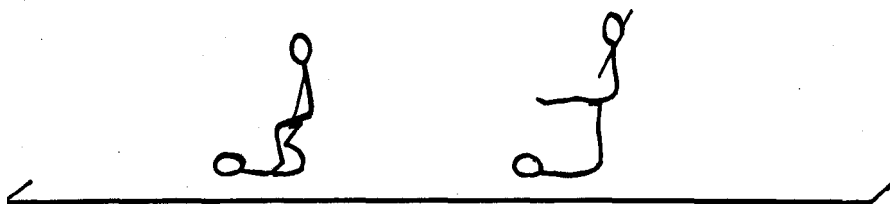
Teaching Suggestions: In order for No.1 to straighten the back and extend the legs, No. 2's feet must be placed well under the thighs.

SITTING BALANCE, FEET ON THIGHS



No. 1 lies down with back on the mat and raises the legs from the floor flexing the knees. No.2, standing with the back to **No.1**, places the thighs against the soles of No. 1's feet in a semi-sitting position. No.2 gives a slight spring from the floor and No. 1 raises the lower legs upward still keeping knees flexed until No. 2's body is balanced over the knees. No.2 places the soles of the feet on No. 1's thighs, and raises the arms sideward.

SITTING BALANCE, FACING INWARD



No. 1 lies down with back on the mat, and raises the legs upward, knees slightly bent. No.2, facing No. 1's head, straddles No.1 and places the body against the soles of No. 1's feet in a semi-sitting position. No. 2 gives a slight push from the floor and No. 1 straightens the knees balancing No. 2 in a sitting position. No. 2 straightens the knees and raises the arms sideward.

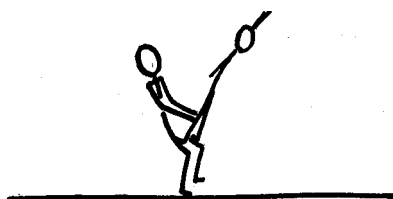
Teaching Suggestions: **In** order for No.2 to straighten the legs, the soles of No. 1's feet should be placed well under No. 2's thighs.

KNEE BALANCE ON BACK



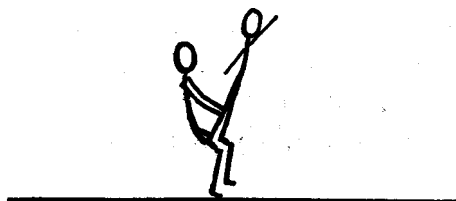
No. 1 stands in a forward stride position, trunk lowered slightly and hands clasped behind the back. No. 2 places one foot in No. 1's hands and with a spring lifts the other foot from the floor. The knee of the leg which is supported by No. 1's hands is placed on No. 1's back and the free leg is raised backward. The arms are raised sideward and the chest and head are lifted.

THIGH STAND BALANCE, FACING INWARD



No. 1 stands in a stride position, knees bent. No. 2 faces No. 1 and mounts to a stand on No. 1's thighs. No. 1 grasps No. 2 behind the knees. No. 2, raising the arms sideward, inclines the body backward until it is in a straight line from head to feet. No. 1 balances No. 2's weight by inclining the trunk slightly backward and centering the weight back.

THIGH STAND BALANCE, FACING OUTWARD



No. 1 stands in a stride position, knees bent. No. 2, facing in the same direction, stands in front of No. 1. No. 2, assisted

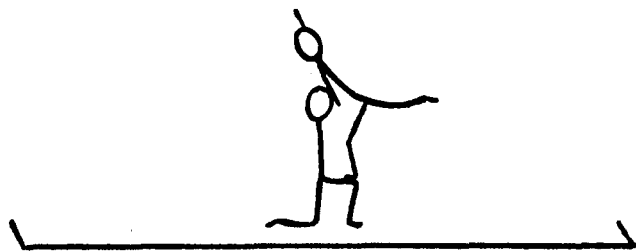
by **No.1**, mounts to a stand on No. 1's thighs. No.1 grasps No. 2 around the knees. Raising the arms sideward, No. 2 inclines the body forward keeping it in a straight line from head to feet, and No. 1 balances No. 2's weight by inclining the trunk slightly backward.

STANDING BALANCE ON KNEES, NO. 1



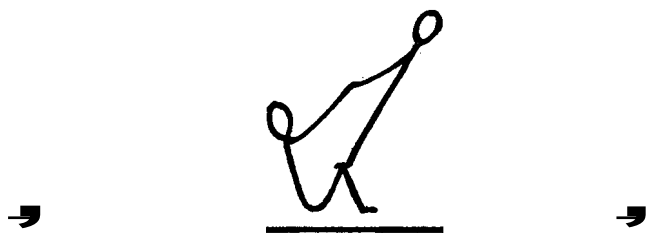
No.1 sits down, knees bent and feet flat on the floor. No.2, facing **No.1**, places one foot on No. 1's knees. Springing from the other foot, the body weight is centered over the foot on No. 1's knees. The free leg is lifted backward and, raising the arms sideward, the body is inclined forward with the head and chest lifted.

STANDING BALANCE ON KNEES, NO. 2



No. 1 kneels on one knee and keeps the other foot flat on the floor. No. 2 steps on the bent thigh above the knee, and lifts into a balance position with the free leg raised backward, body inclined forward slightly, head and chest up, and arms raised sideward.

STANDING BALANCE ON KNEES, FACING INWARD



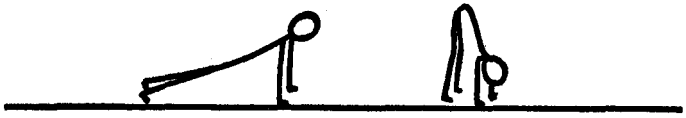
No. 1 sits down with knees flexed and feet flat on floor. No. 2, facing No. 1, stands on No. 1's knees and, grasping hands with No. 1, inclines the body backward so it is in a straight line from head to feet.

CHAPTER X

STUNTS

A. INDIVIDUAL STUNTS

THE CAT WALK



THIS stunt resembles the hunching of a cat's back. The individual places the palms of the hands on the floor, shoulder width apart, at a comfortable distance from the feet, fingers pointing forward. From this position, the individual walks forward with the hands until the body is in a straight inclined line from the head to the feet. The hands and the feet are the only parts of the body touching the floor.

The "cat" hunches its back by taking very small steps with alternate back feet, keeping the knees straight and the feet flat on the floor. The hands are approached as closely as possible without taking the palms from the floor.

After the "cat" hunches its back, it stretches out again by taking tiny steps forward with the front feet (hands), until the body once more is in a straight inclined position from head to feet.

The stunt should be done several times rhythmically at a medium speed. Individuals who can approach the feet and hands very closely, usually the long slender type, can make a comical stunt out of this.

Variation: Reverse the direction by moving the front "feet" to the back, then stretch the back feet backward, thus progressing backward.

DUCK WALK

The individual takes a deep knee squatting position with feet separated, and tucks the hands under the arm pits for wings. Keeping the body close to the ground, progression forward is made without raising the hips. This is accomplished by throwing the leg from the knee to the foot out to the side as it is swung forward for the new step. If the movement is done correctly a pronounced waddle is obtained.

Variations: Try walking backward. Have the ducks choose the best duck and follow him as a leader.

Teaching Suggestions: The Duck Walk serves as a valuable stunt for building up coordinations and body control in various positions which change the center of gravity and require body balance adjustments. The walk should be done at first only for a short time, as fatigue sets in quickly.

THE SPIDER WALK



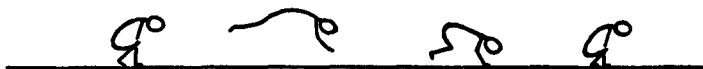
The individual squats down with knees spread apart. The arms are brought between the legs, then 'Out underneath the knees until the hands can be placed on the mat in back of the heels, fingers pointing outward. The weight is placed on hands and feet. From this position the individual walks forward by moving the hands and feet alternately.

THE WALRUS WALK

The individual places the palms of the hands on the floor, shoulder width apart, fingers pointing forward, elbows straight. The legs then are stretched backward, feet close together until the body is straight, with no part touching the floor except the hands and feet. The individual advances forward by moving the hands and dragging the feet behind.

The Walrus Walk should be done only for short distances.

THE FROG HOP



The individual takes a deep knee squat, pointing the feet slightly outward. With arms between the knees, the hands are placed on the floor with fingers pointed in and elbows slightly bent. Pushing strongly with the feet, a long forward leap is taken. As the push is made, the legs are straightened, and during the leap the knees are bent so that the landing is made on the hands and the feet in their original relationship.

Teaching Suggestions: The real frog jump coordination is fairly difficult to obtain. As the body is in the air the legs should be extended straight in the rear until just before the landing.

Variations: Do the stunt rhythmically. Do the stunt for distance jumps. Designate a pond in some section of the room. For music, use Hofer's "Leap Frog," ¹ and follow the action suggested in the selection.

THE RABBIT JUMP

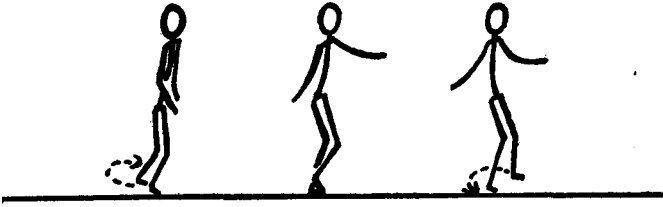
The individual takes a deep knee squat position, and places the hands on the floor forward of, and closer together than, the feet. A leap forward is taken by giving a strong push against the floor with the feet. The hands catch the weight and the feet are brought to the floor on the outside of the hands and as far forward as possible. Another push immediately is taken.

Teaching Suggestions: The following description by Comstock ² serves as an aid in teaching the stunt: "The rabbit uses its front feet as a boy uses a vaulting pole and lands both hind feet on each side and ahead of them."

¹ Hofer, MarL Music for the Child World. Chicago, C. Summy Co., 1902. Vol. II, p. IID.

² Comstock, A. B. Handbook of Nature-Study. Ithaca, N. Y., Comstock Publishing Co., 1929, p. 213.

SWAGGER WALK



The individual walks forward by first swinging the right foot around behind the left foot and as far forward as possible, finally placing it close beside the left foot. As the right foot is placed flat on the floor, the left heel is lifted and the left knee bent. In like manner, the left foot is swung around the right foot. Progress is made by alternating the action of the right and left foot in rhythm.

Teaching Suggestions: Emphasize the lifting of the heel and the bending of the knee of the supporting leg in order to make progress and to keep better balance.

Variations: Reverse the action and retreat backward. Use this step for a short distance relay.

THE FISH FLOP



The first part of the stunt is the same as the Backward Roll. The individual lies on the mat with the body stretched out. As the Roll is taken on the shoulders and the head, and the hands push, the flop is accomplished by straightening the knees and the hips and letting the body come to a rest in a stretched out position, face downward on the mat.

Teaching Suggestions: The emphasis of the flop should be placed on sliding the body backward along the mat rather than throwing the body down on the mat. When this fault is committed, the toes or the thighs are apt to land heavily on the mat. The chest is not in danger of receiving the force of the fall because the hands are supporting the body at this point. Coach the participant to eliminate any kicking tendency of the legs

during any part of the stunt. The back should not be arched before or during the flop. This tendency usually accompanies the kicking of the legs, and, if done, results in throwing the body too much. The individual should have control of the body throughout the entire stunt and, therefore, should approach it slowly at first.

JUMP THROUGH THE HANDS



The individual places the palms of the hands on the floor, farther apart than the width of the hips, fingers pointing forward, and extends the legs backward until they are straight and the body is in a prone position with hands and toes only touching the floor. Beating the weight of the body on the arms, the individual pushes against the floor with the feet and jumps through the space made by the arms without taking the palms from the floor, and lands in a long sitting position.

Teaching Suggestions: To initiate the jump, as in all jumps, the toes must push against the floor so that the force is sent forward and upward. The hips must be bent and the knees tucked up as the actual jump through the arms takes place. This should be followed by an extension of the legs to land in a long sitting position.

Variations: Repeat the stunt starting from a squat position. Take the original position, but cross the arms and jump through the crossed arms.

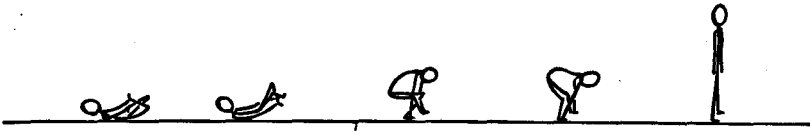
LONG LEGGED SITTING



The individual sits on the mat with knees straight and legs apart. Keeping the legs in this position, the individual reaches over and grasps the soles of the feet with the hands.

Variations: Taking the position described above, the head is touched to the floor without bending the knees. The stunt is made more difficult by placing the wrists on the toes and letting the palms go down the length of the sales of the feet.

THE TANGLE



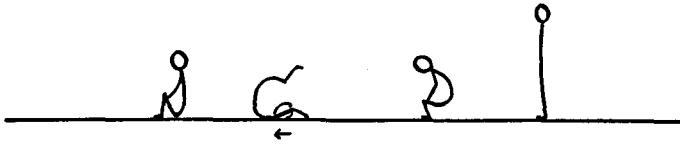
The individual lies face downward on the mat, crosses the ankles, and bends the knees, lifting the crossed feet in the air. The individual reaches directly back with the hands and grasps with each the toes of the foot which is extended toward the hand. Thus, the left hand grasps the right foot and the right hand the left foot.

Without ungrasping the feet, the body is rolled over on to the back. Next, as a preparatory movement to gain a little momentum, the feet are lifted slightly and the hips bent, then the body is rocked forward until the crossed feet are placed flat on the floor and the body is brought to as near an upright position as possible with the hands still holding the feet. The feet are untangled by lifting the one, which is crossed in front, with the hand, which is holding it, over to its proper place. When this is accomplished the individual ungrasps the feet and stands erect.

- Teaching Suggestions:* Most individuals find the stunt easier if the roll onto the back is taken toward the side of the
- arm holding the top foot in the crossed position.

Variations: Reverse the order of the stunt by standing erect, crossing the feet, grasping with the hands, sitting down, lying back, and rolling over.

TUCK-UP.



The individual from a standing position with back to the mat, sits down on the mat, knees bent. Keeping this relatively curled up position of knees close to the chest, the whole body is rocked back until the back is placed on the mat and the feet are lifted from it. With this movement, the arms are swung forward and upward away from the body, elbows slightly bent, ready for the next action. From this position, the body is sent forward by a strong forward and downward pull of the arms and head, until the feet are placed on the mat, the back is raised from it and the body weight is centered over the feet so the individual is able to stand up. If desired, at the finish of the swing of the arms the hands may grasp the front of the ankles or the knees.

Teaching Suggestions: Momentum for the forward action must be gained from the rocking back and the forward and downward swing of the arms.

The head action is important to center the body weight over the feet.

SIDEWARD ROLL

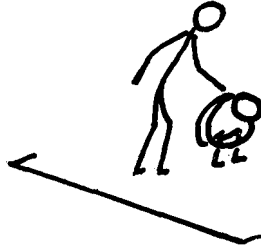
The individual lies down across the mat with the arms raised above the head. In this position, the individual rolls over and over sideward down the length of the mat.

Teaching Suggestions: The Roll is initiated and accomplished by the movement of the hips and shoulders. If the hip lead is too strong the body will not roll straight. Placing the arms overhead helps to get more action in the shoulders. The arms should be relaxed and not be extended stiffly. At all times during the Roll the body should be in a straight line from the hands to the feet. Accuracy should be gained before speed is attempted.

STUNTS

B. COUPLE STUNTS

THE BOUNCING BALL



No. 1 takes the part of the ball and No. 2 of the bouncer. The "ball" may be made in either of two ways: (1) No. 1 squats down with the knees apart, heels together, and the weight on the balls of the feet. The arms are brought down between the knees and the fingers are placed on the floor back of the feet; or (2) No. 1 squats down with the knees and heels together, weight on the balls of the feet. The arms are wrapped around the knees. Whichever technique is used in making the ball, the relative position of body, arms, and legs is kept throughout the stunt, whether the ball is in the air or on the floor.

No.2 stands at the side of the ball and bounces it by tapping it lightly on the back. As No.2 taps, No. 1 pushes against the floor with the feet, and springs in the air. As soon as the feet hit the floor, the spring is taken again. This action is continued rhythmically as long as the bouncer taps.

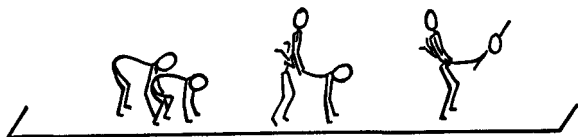
Teaching Suggestions: The stunt requires relaxation and control. The whole body should rise in the air without getting out of position. The hips should be kept low and the spring should be taken from the ankles without straightening the hips or the knees. The ball cannot bounce too long, the "rubber" gives out. The rhythm is important.

Variations: 1. Play O'Lary: No. 2 bounces the ball, and swings one leg over and continues to bounce, as in O'Lary,

2. Make the ball travel forward.

3. Bounce the ball, traveling forward on long mats, and, at a given signal have the ball do a Forward Roll without losing the position, and continue the bouncing rhythmically.

FLYING SWAN

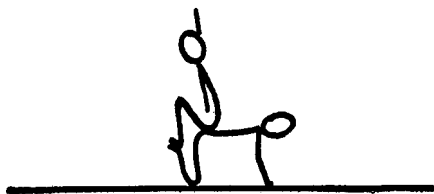


Nos. 1 and 2 stand facing in the same direction, with *No. 1* in front. of *No. 2*. *No. 1* places the hands on the floor, and *No. 2* steps forward between *No. 1*'s feet. Assisted by *No. 2*, *No. 1* lifts the legs, resting the inner side of the thighs on *No. 2*'s hips and locking the legs around *No. 2*'s waist by crossing the ankles in back of *No. 2*. *No. 2* places the hands at each side of *No. 1*'s body near the waist line.

In this position, they walk forward, *No. 1* on the hands and *No. 2* in the usual fashion. After a specified number of steps, for instance, three or four, they stop. *No. 1* lifts the trunk upward carrying the arms sideward and the head up in a swan position. *No. 1*'s action is accompanied and assisted by *No. 2* leaning backward from a flexed knee position so that the trunk and thighs are in a straight line. *No. 2*, also, helps to hold *No. 1*'s body in the swan position by the grasp at the waist. *No. 1* lowers the trunk from the swan position, and the action is repeated by starting the walk again. The walk and the swan position are done in rhythm.

Teaching Suggestions: *No. 2* in leaning backward should thrust the hips forward to make the abdomen flat, and avoid bending in the hips.

No. 1's part should not be attempted by an individual with a long trunk as the swan position will require too great an arch of the back, tending to cause a strain.

"GIT UP NAPOLEON"¹

No. 1 takes the part of Napoleon, an animal of rather questionable nature, and No.2 acts as the rider.

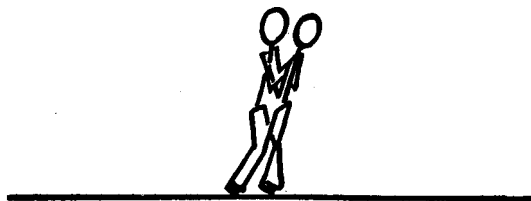
No. 1 kneels on hands and knees, trunk horizontal with the floor, with feet lifted from the floor. No.2 sits on the broad part of No. 1's back over the hip region, facing backward, and places the feet flat against the soles of No. 1's feet. At the command of, "Git up, Napoleon," No. 1 walks forward on hands and knees, making an alternate up and down movement with the feet. No.2, keeping the soles of the feet in contact with No. 1's and raising the arms sideward for balance, attempts to remain seated during the journey.

Teaching Suggestions: Some Napoleons are much easier to ride than others. Keeping the balance can be learned only by practice. Relaxation helps a great deal.

Variations: This stunt is a good one to use in a demonstration where comedy is desired. The following suggestions add to its humor:

1. Napoleon bucks throwing the rider.
2. Napoleon flattens out completely and can be restored to his original position only after using an air pump or some other remedy.
3. Napoleon lowers his front part by bending the elbows letting the forearms come to the mat, and bringing the head close to the mat. The rider leans backward until the back is placed against Napoleon's back and slides backward toward the mat. At the right moment, Napoleon bucks sending the rider over into a Backward Roll.

DOUBLE WALK



No. 1 stands facing No. 2 and places the feet on No. 2's feet. Nos. 1 and 2 grasp each other's upper arms. No. 2 walks forward, keeping No. 1 in the position described above.

EIGHT-LEGGED ANIMAL



No. 1, standing with the feet well apart, bends forward and places the hands on the floor. The hips are kept high by only slightly bending the knees. No. 2 approaches No. 1 from the rear in the same position as described for No. 1, and walks between the spread legs until the head and trunk are under No. 1's body.

The "animal" starts walking forward by each individual moving the left hand and left foot forward at the same time, then the right hand and the right foot.

ROCKING STUNT



Nos. 1 and 2 sit down facing each other and extend their feet forward so that No. 1's feet are between No. 2's. Then each sits on the other's feet, grasping hands. To rock, No. 1 leans backward, lifting the legs up under No. 2, who has come to a semi-standing position by No. 1's action. No. 2 then sits

down, leans back, lifting the legs up, and No. 1 is brought to a semi-standing position. This action is repeated rhythmically as many times as desired.

Teaching Suggestions: To make the rocking successful, a certain momentum must be gained. No. 2 must not expect to be lifted to the standing position by No. 1's feet, but must gain a certain spring from the alternate rising and sitting down. Each, in turn, must follow the rising body with the feet.

EXTENDED LEG ROCKER



Nos. 1 and 2 sit facing each other with the knees well bent and the soles of the feet touching those of the partner. They grasp hands, and, keeping the soles of the feet together, raise the legs upward until the knees are straight. Attempting not to disturb the position of the legs, they start the rocking by No. 1 leaning backward and No. 2 bending forward. This action is alternated between the two to continue the rocking.

Teaching Suggestions: This stunt stretches the ham string muscles, so should be led up to by more simple stretching stunts as the Cat Walk, Wicket Walk, etc. It can be done, also, progressively, by raising only one set of legs at a time, keeping the other set on the floor and rocking in this position.

THE SCOOTER



The Scooter is so called because the partners doing the stunt progress and "scoot" along the floor.

Nos. 1 and 2 sit facing each other with knees flexed, feet flat on the floor, and No. 1's feet between No. 2's. Each moves forward and sits on the other's feet, and grasps each other's upper arms. In a combined movement, No. 2 leans backward

and No. 1 rises about a foot from the floor. The original relative position is kept by No. 2 lifting the feet to keep contact with No. 1's body. No. 2 brings the feet down to the floor with the knees more extended than originally, and, during this movement, No. 1 keeps the body in contact with No. 2's feet by sitting down.

No. 1 now leans backward, and No. 2 rises with No. 1's feet lifting to keep contact and assist. No. 1 brings the feet to the floor, flexing the knees as much as possible, and No. 2 keeps contact with the feet by sitting down.

In this manner, the partners progress forward rhythmically, advancing by the extension of No. 2's knees as No. 1 sits down, and the flexing of No. 1's knees as No. 2 sits down.

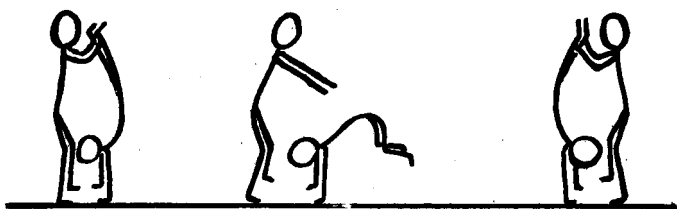
Teaching Suggestions: The partners should relax and not hold each other with a tense grip. The stunt requires control and balance. The feet must be placed flat on the floor, or otherwise, the partner sitting on them has an uneven base and, as a result, will lose the balance and tighten the muscles. The emphasis should be placed on progressing forward rather than on lifting the body high from the floor.

Variations: 1. Try changing the line of direction by making angles and going in a circle.

2. Take a certain number of "scoots" forward, and a certain number in the opposite direction.

3. The Scooter stunt can be used as a race. See the Scooter Race, page 259.

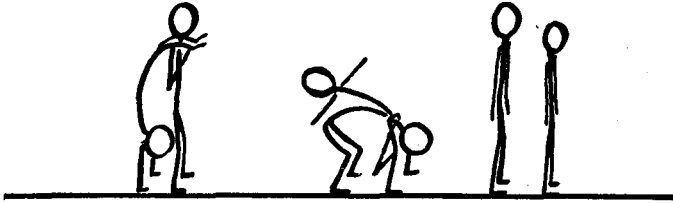
PARTNER HANDSTAND



Nos. 1 and 2 stand facing each other, about four feet apart. No. 1 does a Handstand. As the position is reached, No. 2 grasps the ankles of No. 1 and gives a forward push causing

No. 1 to descend from the Handstand. As soon as *No. 1* gains the upright position, *No. 2* does a Handstand, and *No. 3* repeats *No. 2*'s former action. The Handstand is alternated continuously and rhythmically.

HANDSTAND AND OVER BACK



No. 1 stands behind *No. 2*, facing in the same direction. *No. 1* does a Handstand letting the feet come over *No. 2*'s shoulders. *No. 2* reaches back and grasps *No. 1*'s legs, then bends forward, pulling *No. 1* over until *No. 1* is standing on the floor in front of *No. 2*. *No. 2*, whose head has been between *No. 1*'s legs, withdraws it and straightens up to a standing position in back of *No. 1*.

Variation: As soon as *No. 1* lands on the feet it is possible to do a Forward Roll. *No. 2* may follow, also, with a Forward Roll.

C. GROUP STUNTS

LONG SCOOTER



Nos. 1 and 2 make the Scooter (see page 209), with *No. 1*'s back to the line of progression. A line of individuals is formed behind *No. 2* in the following manner: *No. 3* sits down directly behind *No. 2*, spreading the bent knees so the legs come at the sides of *No. 2*, and wraps the arms around *No. 2*'s waist. *No. 4* sits down directly behind *No. 3* in the same fashion, and so on for the rest of the group.

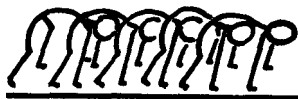
The Scooter starts to progress by *No. 2* and the line lean-

ing backward and No. 1 lifting the body slightly from the floor with No. 2's feet in contact with the body. In lowering the feet, No. 2 straightens the knees, advancing No. 1 in the line of direction as the sitting position is retaken, and each member of the line also straightens the knees placing the feet farther forward. No. 1 leans backward and No. 2 lifts the body slightly from the floor with No. 1's feet in contact with the body. In lowering the feet No. 1 flexes the knees, advancing No. 2's body in the line of direction by drawing it closer as the sitting position is retaken, and each member in the line bears the weight on the feet and scoots the body along the floor until the knees are well bent. This alternate action of straightening and bending the knees continues, advancing the Scooter down the floor.

Teaching Suggestions: Be sure the individuals in the line grasp around the waist of the member in front.

The floor should be perfectly smooth for this stunt.

A THOUSAND-LEGGED ANIMAL



No. 1, standing with the feet well apart, bends forward and places the hands on the floor. The knees are bent only slightly to give the hips greater height. No. 2 approaches No. 1 from the rear to the same position as described above and walks between the spread legs until the head and upper trunk are under No. 1's body. No. 2 makes the same effort to keep the hips high. All the other members join the line in like manner.

The animal starts walking forward by each individual moving the left hand and left foot forward at the same time, then the right hand and the right foot.

To disband, No. 1 slips off of No. 2, No. 2 off of No. 3, etc.

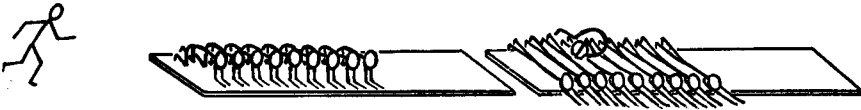
Teaching Suggestions: The tallest individual should be at the front and the smallest at the end of the line. It is a good idea to practice the coordination of the walk individually be-

fore the animal is formed. Increase the size of the animal gradually, starting with two or three at first. The knees have a natural bend in the walk but there should not be too great a space between the hands and the knees.

Variations: The following comical variations may be used:

1. The animal stops suddenly with hands and feet immovable at the same instant.
- ~. The animal kicks the legs on one side.

FAKE DIVE OVER BODIES



A group of individuals facing forward kneel side by side on hands and knees with backs flat. See page 175 for positions. A single individual, who is to perform the Roll, approaches the line of individuals from the side, and upon reaching it, takes a jump on both feet with the apparent intention of diving over the bodies. Simultaneously with the jump, the individuals in the line flatten their bodies out by sliding forward with the hands until they are lying face downward on the mat. After the jump, the roller springs from the feet, places the hands on the thighs of the first member in the line, tucks the head, and does a Continuous Forward Roll over the thighs of the group lying on the mats.

Variations: This stunt furnishes comedy in a demonstration, if used after a series of dives over a number of bodies. A larger number of individuals is put in the line than the best diver in the performance can dive over. The roller runs forward, apparently with full intention of making the dive, but loses courage upon approaching the line and stops. Another attempt is made with the same result. On the third attempt, the roller jumps and springs, but the bodies flatten out and, instead of a dive, the Continuous Forward Roll is taken,

SKIN THE SNAKE THROUGH THE LEGS



A group of individuals stand in a stride-position one behind the other. Each individual bends the trunk forward and reaches the right hand between the knees to the individual in back. At the same time, each reaches forward with the left hand and grasps the right hand of the individual in front,

Still keeping the line linked together in the above manner, the last individual of the line begins to progress down the length of the line by crawling between the legs of the individuals in front. The original second to the last individual starts to crawl as soon as the progress of the first crawler makes it necessary to move to keep the line intact, and so on for each individual in the line, except that the individual, who originally was first in the line, does not crawl. Each crawler stands up as soon as the end of the line is reached and progresses the line forward, which still is intact.

CHAIN FORWARDROLL



A group of individuals form in a line one behind the other. Each individual, bending the trunk forward, reaches the right hand between the knees to the individual in back and the left hand forward to grasp the right hand of the individual in front.

Keeping the line linked together in the manner described above, the first individual tucks the head and does a Forward Roll, ending with the body flat on the mat, legs spread apart. The other individuals begin to walk forward as the Roll progresses, the second individual in the line straddling the body on the mat. This individual then takes a Forward Roll between the legs of the one on the mat. This action continues with the line progressing over the bodies on the mat until each individual has rolled and all are lying on the mat.

Standing position may be regained by the original first member of the group, who was the first to lie down, standing up and advancing forward straddling the bodies on the mat. With hands still linked, each member, in turn, rises and the line advances forward until all are up.

Teaching Suggestions: After spreading the legs apart so that an individual can take a Roll between them, each member should draw the feet as close as possible to the individual lying between them, in order that the other members who are advancing over the bodies and straddling the feet do not stumble over them.

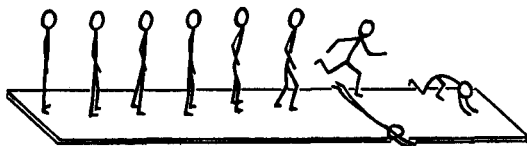
A definite step rhythm can be established by the members of the group as they advance forward over the bodies.

CHAIN FORWARD AND BACKWARD ROLL

A line of individuals do the Chain Forward Roll. See page 214. When the line is flat on the mat, the individual, who was last to lie down, does a Backward Roll and begins to walk backward straddling the bodies on the floor. The second member in the line rolls backward as soon as the progress of the first individual makes it necessary to do so to keep the line intact. This is repeated by each individual in turn, until all members again are in their original positions.

Teaching Suggestions: The first member to regain standing position from the Backward Roll can assist the second member in doing the Backward Roll by exerting a pull on the arm, which is grasped, as the Backward Roll is being completed. This pull, if directed correctly backward and slightly upward and timed correctly, will aid the individual in coming to a standing position. If the pull is exerted too early the result is that the individual attempting to do the Backward Roll is slid along the mat. It should be timed to take place just as the feet touch the mat. Each individual, in turn, may assist the next individual in this manner.

SIDEWARD ROLLS AND LEAP



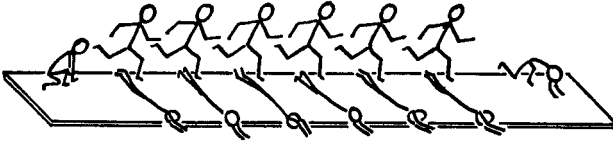
A number of individuals, depending upon the length of the mats, stand in a file formation with a space of four feet between each. No. 1 lies down on the side across the width of the mat and starts a Continuous Sideward Roll (see page 204), toward the file. As No. 1 approaches, No. 2 leaps over the knees and lands in No. 1's original position. No. 2 then lies down and begins to roll toward the file. Each member, in turn, takes a leap over the approaching rolling body; each lies down and starts to roll as the head of the line is reached; and each, upon rolling to the end of the line rises and starts to leap over the approaching rolling members. In this manner, the stunt is made continuous.

Teaching Suggestions: Rhythm is important in this stunt. Timing the leaps and rolls and keeping the spacing accurate between the members are essential to make the stunt successful.

It is advisable to do the stunt slowly at first. To roll successfully, relax, keeping the body placed accurately across the mats at all times. Extending the arms overhead aids in guiding the body. The leaps should be taken over the knees of the rolling person. This prevents the possibility of injury caused by stepping on the other parts of the body.

Variations: The individuals stand side by side with a space of four feet between each. As the rolling body approaches, they take a sideward jump over the knees.

TEAM SIDEWARD ROLLS AND LEAP



An even number of individuals form a file facing the end of the mat with a space of about four feet between each member. The even numbered individuals lie down on the side across the width of the mats. At a signal, all even numbers start rolling sideward down the mats, and the standing members leap over the approaching rollers.

The first standing member, after leaping over the first rolling body, lies down and becomes a roller. Each standing member follows in turn as the head of the line is reached; and each rolling member, as the end of the line is reached, rises and begins to leap over the approaching rollers.

Variations: The individuals stand side by side in a line with about four feet of space between each. As the rolling body approaches, they take a sideward jump over the knees.

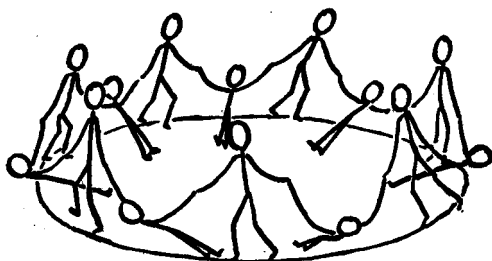
MERRY -GO-ROUND NO. 1



Eight individuals form a circle, taking a wrist grasp. Nos. 1, 3, 5, and 7 sit down on the floor with the legs straight and feet together in the center. At the signal for the Merry-Go-Round to go, the standing members take a step outward and the sitting members, supported by the grasp of the standing ones, raise their hips from the floor bringing the body in a straight line inclined position from the feet to the head. The Merry-Go-Round revolves by Nos. 2, 4, 6, and 8 running around the circle and Nos. 1, 3, 5, and 7 pivoting on the heels.

Teaching Suggestions: Nos. 1,3,5, and 7 should be smaller individuals than Nos. 2, 4, 6, and 8. The wrist grasp is more efficient than the hand grasp. The running individuals should be careful to keep the circle the original size. If this is not done, the supported members are pulled from the center and are not able to brace against each other's feet. The Merry-Go-Round should move only for a short time to avoid any undue pulling of the arms.

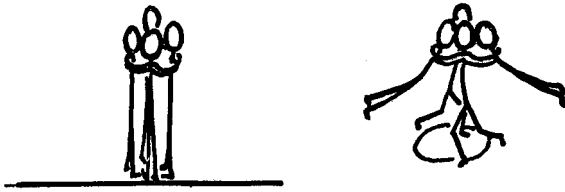
MERRY-GO-ROUND No.2



A large circle of an even number of individuals is formed with the members taking a wrist grasp. The odd numbers sit down on the floor with the legs straight, pointing toward the center of the circle. The Merry-Go-Round is started as described in Merry-Go-Round No. 1. However, in this case, the circle revolves by the standing individuals running around and the sitting individuals taking small and fast side steps on the heels.

Teaching Suggestions: It is essential that the standing members as they run keep the circle true. Also, the members taking the small steps on the heels must time the steps so they can keep their relative position with the running members, and with the center of the circle.

MERRY-GO-ROUND NO. 3



Four individuals stand close together in a circle facing the center, with No. 1 opposite No.2, and No. 3 opposite No.4. Lowering the heads slightly forward, Nos. 1 and 2 reach their arms across the backs of the necks of Nos. 3 and 4 and grasp wrists. Nos. 3 and 4 reach their arms across the necks of Nos. 1 and 2 and grasp wrists. The Merry-Go-Round revolves by Nos. 3 and 4 taking small fast steps sideward. Nos. 1 and 2, supporting their weight with the grasp around the necks of Nos. 3 and 4, lift the feet and let the bodies swing into the air by the momentum of the speed of the circle.

Teaching Suggestions: Nos. 1 and 2 must be very light weight individuals and Nos. 3 and 4, strong, sturdy individuals.

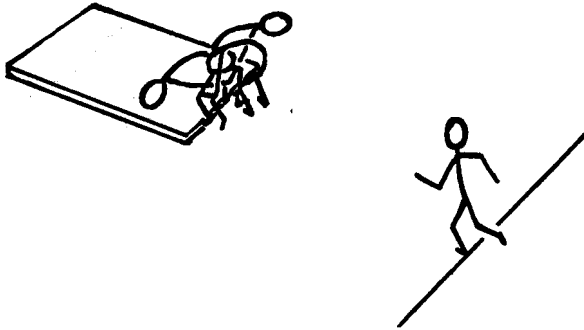
MERRY-GO-ROUND No.4



Nos. 1, 2, 3, 4, and 5 stand side by side in a line ranging in height with the tallest in the center and the smallest members at the two ends. Nos. 2 and 4 place one arm around the waists of Nos. 1 and 5 respectively, and reaching around No.3, grasp each other's wrists. No.3, reaching behind Nos. 2 and 4, grasps wrists with Nos. 1 and 5. The line revolves by pivoting around the center with short fast running steps, and, during this action, Nos. 1 and 5 lift their feet from the floor and let their legs from the waist down swing into the air.

Teaching Suggestions: Nos. 1 and 5 should be small, light weight individuals, and Nos. 2, 3, and 4 sturdy and strong individuals.

HEAD ROLL OVER BODIES



Nos. 1 and 2 stand on the mat back to back with feet apart, facing the sides of the mat. They each bend over keeping the hips together and, reaching the arms back between the knees, lock together by grasping hands.

No. 3 in a position with the feet apart and knees slightly bent, faces the side of Nos. 1 and 2, bends forward, back flat, and tucks the head against Nos. 1's and 2's hips. No. 3 locks with the others by wrapping the arms around Nos. 1's and 2's knees.

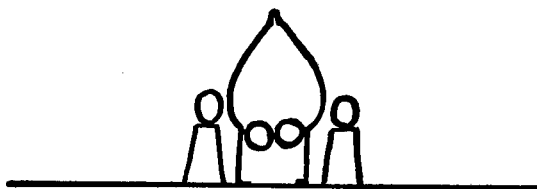
No. 4, from a distance of about four yards from the group, runs forward approaching No. 3 from the rear. Springing from both feet, No. 4 places the hands on No. 3's hips, tucks the head, and does a Forward Roll over the bodies, coming to a stand on the other side of the mat.

Teaching Suggestion—Nos. 1, 2, and 3 should center the weight of their bodies so they are in a good balanced position. No. 4's weight in the Roll is distributed over the three bodies so that no one individual receives it all.

No. 4 should spring lightly, getting enough height to make possible the lifting of the body into the Roll over the bodies, but the spring should be directed forward, also, in order that the force may be put into rolling forward. No. 4 should avoid taking a high spring and landing down on No. 3's back.

As the Roll is being completed, in order to land on the feet in an upright position, the head, trunk, and arms should be swung forward at the time the legs are descending. This insures a balanced body with the weight forward.

HANDSTAND OVER KNEELING BODIES



Nos. 1 and 2, facing the front, kneel at a distance of at least a yard or more from each other. Nos. 3 and 4 stand at the outer side of Nos. 1's and 2's bodies, respectively. They each bend over the kneeling body, place their hands on the mat and do a Handstand, letting their feet touch.

D. STUNTS WITH APPARATUS

WAND PULL-UP



The individual, lying flat on the back with the legs straight, places a wand, which is held by grasping each end, behind the head. The grasp then is released and the wand is slipped down a little past the wrists so it is resting on the forearms. The individual then rises to a sitting position without lifting the feet from the floor.

Teaching Suggestions: This is a difficult stunt. It can be led up to progressively by the following steps:

1. Come to a sitting position with the arms to the side.
2. Repeat, putting hands behind the head.
3. Repeat, putting arms in a similar position to that taken when the wand is used.
4. Use the wand.

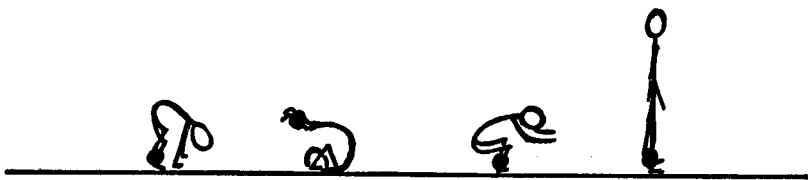
ROLL BETWEEN INDIAN CLUBS



A number of indian clubs are stood in a row on the floor down the length of the mats, with a distance of about 27 to 30 inches between each. An individual stands in front of the first space and does a Forward Roll across the mat. Upon regaining the standing position, the individual takes a jump in the air turning the body around and, at the same time, moving side-ward to the next space. The Forward Roll again is taken and the action continued until all spaces have been covered.

Variations: Take a Forward Roll and, upon regaining the standing position, jump sideward without turning. Do a Backward Roll in the next space. Alternate the Forward and Backward Rolls until all the spaces have been covered.

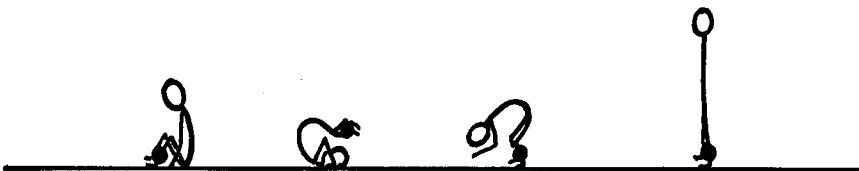
FORWARD ROLL, BALL BETWEEN ANKLES



The individual places a basket ball or volley ball between the ankles and does a Forward Roll, retaining possession of the ball as the standing position is regained.

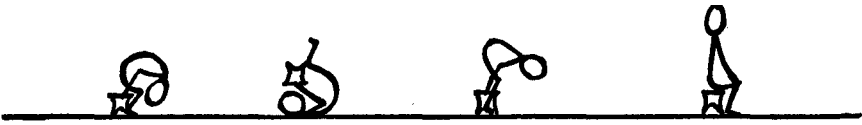
Variation: Repeat the above, holding the ball between the knees.

BACKWARD ROLL, BALL BETWEEN THE ANKLES



The individual places a basket ball or volley ball between the ankles and does a Backward Roll, retaining possession of the ball as the standing position is regained.

FORWARD ROLL WITH STOOL



The individual sits on a low stool, spreading the knees wide and grasping the sides of the stool with the hands. From this position the individual bends forward, tucks the head and, with a push from the feet, does a Forward Roll. As the individual rolls onto the back, the stool is carried over the body until, as the tuck-up position is gained, it is held in front of the body. The feet are separated on the mat as the Roll is completed, and, as the individual rises, the stool is carried back between the knees to a position on the mat behind the individual, who completes the stunt by sitting on the stool as in the original position.

TEAM SHUTTLE DIVE OVER BALL



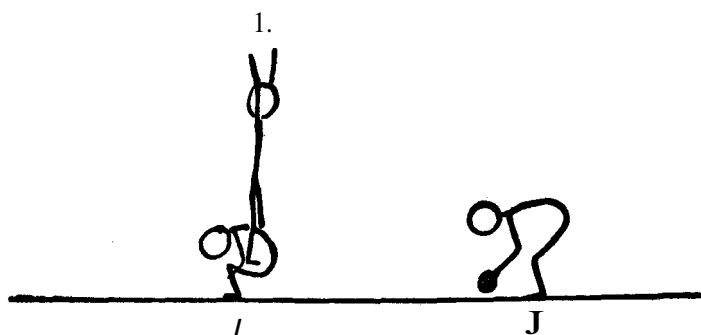
An equal number of individuals lines up one behind the other in two files, each file facing the other at a distance of about 5 yards. The odd numbers, 1, 3, 5, 7, etc., make up one file, and the even numbers 2, 4, 6, 8, etc., the other file.

No.1 steps forward in the space between the two files. No. 2 has a basket ball or volley ball and starts the action by rolling it to No.3. No. 1 dives over the ball, does a Forward Roll, and, upon regaining the standing position, runs to the end of the even numbered file, keeping to the right.

No.3 in the meantime catches the ball and rolls it to No.4 in the opposite line. No.2 dives over the ball, does a Forward Roll and runs to the end of the odd numbered line, keeping to the right. -

The action is continued until all are in the opposite file.

SHUTTLE ROLL WITH BALL



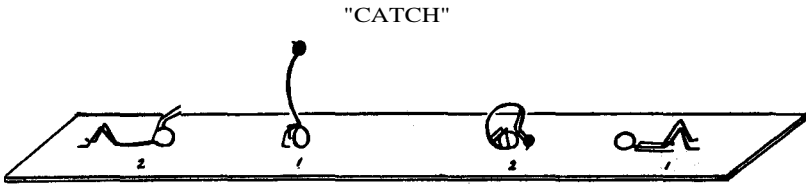
Three individuals line up as in the Shuttle Roll (see page 168). No. 2 holds a basket ball or volley ball, and starts the action by rolling it to No.3. No.1 dives over the approaching ball and takes a Forward Roll. No.2 straddle jumps over No. 1 as the tuck-up position is reached. In the meantime, No. 3 has caught the ball and rolls it toward No. 1. No.2 dives over the approaching ball and does a Forward Roll. No. 1 arises from the Roll and jumps around to catch the ball. No. 3 straddle jumps over No.2, No. 1 rolls the ball to No.2, and No. 3 dives over it and does a Forward Roll. No. 1 straddle jumps over No.3 and the action continues.

Teaching Suggestion: Students should know the straddle jump and, also, the dive over an object before attempting the stunt. In addition, the following progressive steps may be used to initiate the work with the ball:

1. Dive over a stationary ball and do a Forward Roll.
- ~. Dive over a rolling ball and do a Forward Roll.

The stunt should be done slowly at first with emphasis on accuracy. Every roll must be in good form. Accurate timing is essential to smooth the performance. Eliminate all unnecessary movements and adjust the distance between the performers until the proper one, which serves best, is gained.

This stunt makes a good demonstration number. A large rubber inflated ball of bright colors is desirable when the stunt is used for this purpose.



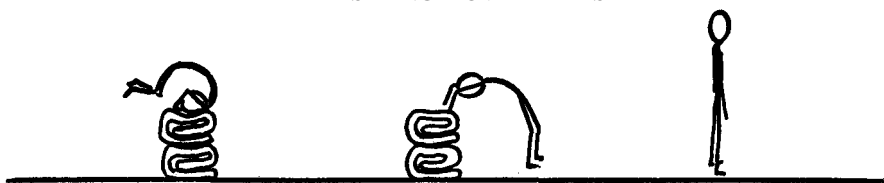
Nos. 1 and 2 stand on the mats with backs turned to each other and with a distance of from three to six yards between them, depending upon their throwing ability. No.2 lies down on the back with knees flexed and feet flat on the mat. No. 1 puts a basket ball or volley ball between the ankles, goes into a Headstand, and after the balance is gained, throws the ball with the feet to No.2. No.2 catches the ball with the hands, and places it on the floor beyond the head. No.2 then does a Backward Roll, bringing the feet down on each side of the ball. During this time, No. 1 descends from the Headstand by taking a Forward Roll, finishing in the position on the back as originally taken by No.2. No.2, after grasping the ball between the ankles, does not straighten up, but continues the action by going into the Headstand and throwing the ball to **No.1**, who repeats No. 2's original action. The alternate throws are continued as long as desired.

Teaching Suggestions: Before putting the stunt together, it may be wise to teach it in the following progressive steps:

1. Place the ball beyond the head while lying on the back and take a Backward Roll, finishing with the ball between the ankles.
2. Place the ball between the ankles and do a Headstand. Throw the ball.
3. Do the complete stunt.

Experiments will determine the correct distance between the two performers. When the stunt is done well, there are no waste movements or adjustments necessary on the part of the performers as they go from one sequence to another.

HEADSPRING OVER MATS



One mat is placed on the floor and on it, near the end, is placed a pile of folded mats reaching about waist high to the average participant. The mats should be folded so they are not more than two feet wide and can be placed flat on top of each other.

The individual runs forward, takes a spring from both feet and places the hands and the head on the top mat. The impetus of the spring is used to roll the body over on the head. The legs trail behind causing the hips to be bent. As the roll on the head nears completion, the legs are snapped forward, causing the position of the body to change. This movement is accompanied by a strong thrust from the hands and the head. As a result of the two movements, the body is carried over until the feet are placed on the floor mat, and the upright position is gained.

Teaching Suggestions: The timing of the snap is important in the success of the stunt. It comes at the time when the trunk has rolled just past a vertical position with the mats. The snap must have a momentum forward, or the movement will result in arching the back only causing the individual to fall on the piled up mats. It is well while the stunt is being learned to have two assistants, one on each side of the floor mat just in front of the rolled mats, to help in flipping the individual over to prevent hard sitting.

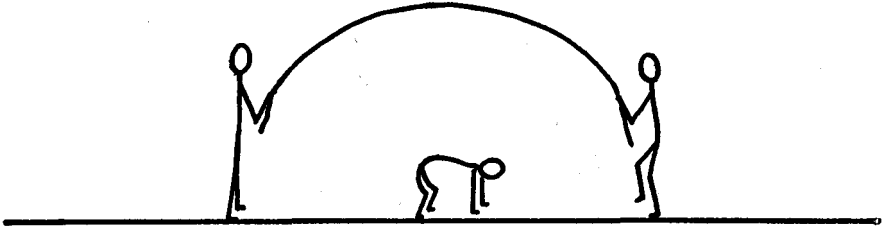
DIVE OVER WAND

See Page 176

!DIVE THROUGH HOOP

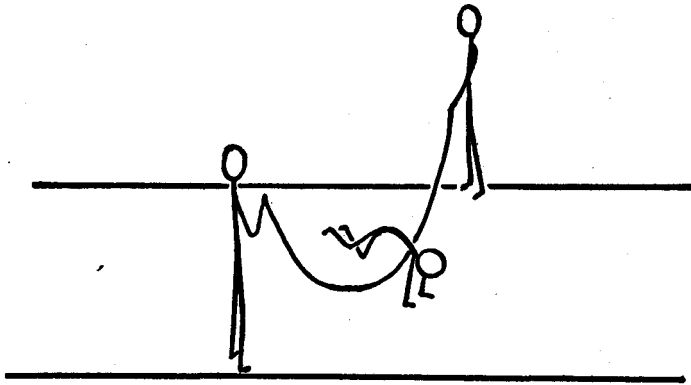
See Pages 178, 179

JUMPING ROPE ON AIL FOURS, SIDE OF BODY TO ROPE



Two individuals stand ready to turn a jumping rope. In the center of the jumping space, a third individual takes a position on hands and toes, with the side turned to the rope. As the rope approaches in the turn, the individual jumps over it by springing up from the hands and toes. This is continued as long as desired.

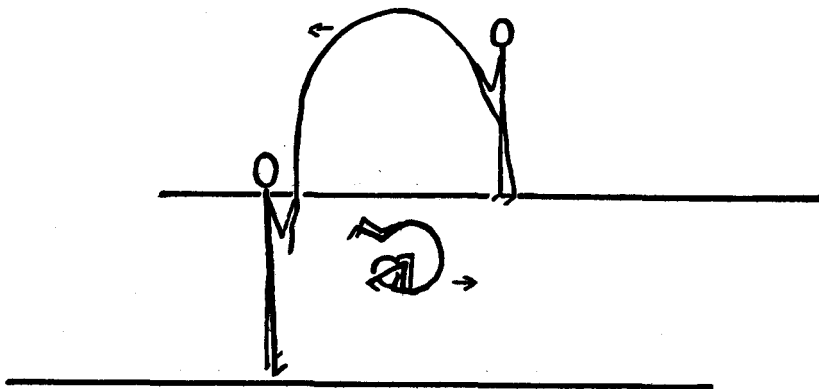
JUMPING ROPE ON ALL FOURS, FACING THE ROPE



The individual who is to jump takes a position on hands and toes facing the rope. As the rope approaches, the individual springs, in turn, from the hands and feet, clearing the rope first with the hands, then the feet. This is continued rhythmically.

Teaching Suggestions: This is a strenuous stunt and should not be continued too long. **It** takes good coordination and rhythm.

FORWARD ROLL THROUGH ROPE, FRONT DOOR



Standing across a mat from each other, two individuals turn a jumping rope. A third individual stands ready to enter the rope from the "front door." As the rope hits the mat and begins to ascend, the individual takes a step forward, does a Forward Roll in the jumping space, rises, and leaves during one revolution of the rope.

Teaching Suggestions: Timing the entrance of the Forward Roll just after the rope hits the mat is important for success. Feeling for correct timing may be gained by the following steps:

1. Watch the rhythm of the rope and clap hands as it strikes the mat.
- fl. Watch individuals do the Forward Roll on the mat and clap the hands as the spring is taken and, again, as the roll is completed.
3. Have the jumping rope turned and do the Forward Roll through the rope.

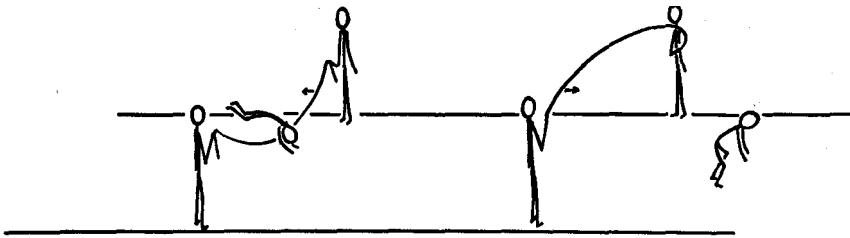
The rope should be long enough to make a large revolution in space. This may be accomplished by the individuals who are turning the rope, standing in relation to each other so that there is considerable slack in the rope. It should be turned at a moderate rate of speed.

Emphasis should be put on the fact that correct technique

must be used in taking the Forward Roll. An individual rushing into the rope with careless technique is apt to get a bumped head, for the common tendency in hurrying is to sprawl out; The individuals turning the rope can be coached to pull it from the mat if they see that the individual taking the roll has timed it incorrectly, and, in this way, prevent it from striking the individual forcibly.

Enough distance must be gained in the Forward Roll to clear the individual of the rope.

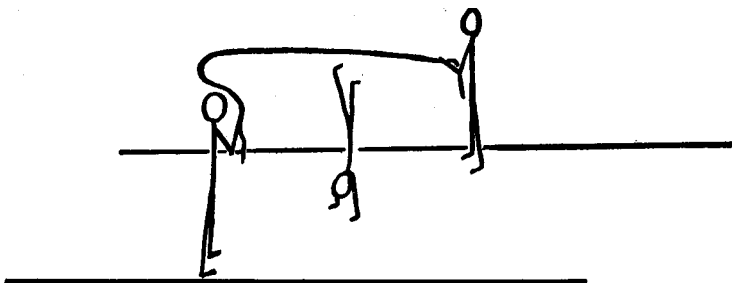
FORWARD ROLL THROUGH ROPE, BACK DOOR



Two individuals turn the jumping rope on a mat. A third individual stands ready to enter from the "back door." As the rope hits the mat and ascends, the individual dives over it and goes into a Forward Roll, rising clear of it during one revolution.

Teaching Suggestions: Timing the dive is important. The spring must be taken so the dive can be made before the rope has ascended too high.

CARTWHEEL THROUGH THE ROPE



Two individuals turn a jumping rope at a moderate rate of speed. A third individual stands ready to enter the rope from the "front door." Just as the rope hits the floor, the individual takes a Cartwheel and leaves the rope during one revolution of the rope.

Teaching Suggestion, !: The rope should be long so that as it is revolved it makes a high arc overhead. This gives the individual more time for the Cartwheel as the rope travels a larger area.

CARTWHEEL IN THE ROPE AND JUMP

Two individuals turn the rope as described above. The third individual enters the rope from the "front door" by a Cartwheel, jumps the rope several times, then runs out.

Teaching Suggestions: The Cartwheel takes four counts. Have the students watch the rope turn and catch the rhythm: hand, hand, foot, foot, jump-jump-jump. Have the students, while watching the rope, clap the rhythm and jump as the rope hits the ground.

CARTWHEEL IN THE ROPE, CARTWHEEL OUT

The individual enters the rope with a Cartwheel and jumps, as described in the preceding stunt. The exit is made by another Cartwheel.

CHAPTER XI

STUNT *AND* TUMBLING GAMES AND REL~

A. STUNT AND ~UMBLING GAMES

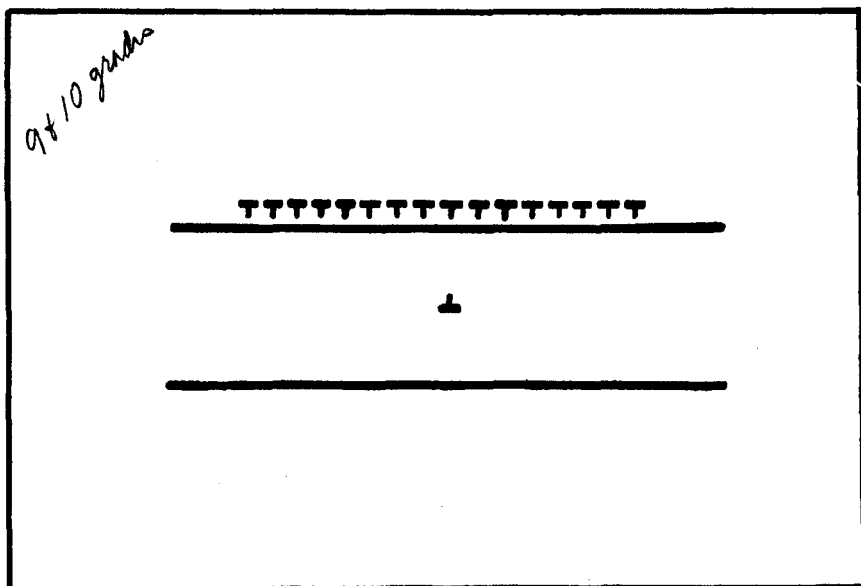
THE use of stunts and tumbling activities in a game form opens a field which appeals especially to children and, likewise, offers a variation for older students. The games provide an opportunity for participation in activities already known and enjoyed, hence, the student is able to see the application of his accomplishment. Again, some games may stimulate the development of speed after accuracy is gained. Some provide for the development of the ability to evaluate and appreciate performance and for the development of desirable social qualities, such as team work and fair play. Others may promote a desire to perfect particular stunts and tumbling activities.

Stunt and tumbling games are valued, also, for the possibility they offer for original work. Children in the elementary school may be able to originate an enjoyable game, and high school and college students may take real interest in such projects.

Some of the games presented in this book have been originated by college students and are so designated.

ANIMAL TAG

Opal Prather



Players: any number.

Equipment: none.

Two lines are drawn on the floor, parallel to each other and about six yards apart. One player is "It" and stands in the center of the space between the lines. The other players line up behind one of the lines.

"It" calls out the name of an animal as, "Crabs I" All the players must cross over the space and beyond the other line doing the Crab Walk. "It" does the Crab Walk, also, and attempts to tag as many players as possible before they get past the line. Players, who are tagged, join "It" and the game continues by the "It" group again calling the name of an animal, and the players crossing over. The last player caught becomes "It" for the next game.'

Rules: 1. "It" must tag only with the hand.

2. A player is tagged if "It" touches any part of the clothing or person.

stand, without moving the feet after rising." The paired opponents then run to the scattered mats and one player of each couple attempts the stunt while the respective opponent judges the performance as a success or failure. The one acting as judge then attempts the stunt while the opponent judges. Each player is given one trial. Upon completion of the stunt, all players again form the double circle. The leader then takes a count of players of each team doing the stunt correctly, awarding a point for each success. The captains keep record of the score. Upon signal of the leader, the players advance around the circle again until the music stops. The leader calls a new stunt and the game continues as long as desired. The team wins which, at the end of the playing time, has the greatest total of points.

Teaching Suggestions: This game offers the opportunity for a review of stunts previously learned. It makes possible social contact among the students. It gives the students the experience of observing performance, and giving judgments which are guided by definite criteria.

The leader must state completely and definitely the requirements of each stunt. Stunts should be selected, the performance of which can be judged decisively as success or failure. Students should not be asked to judge quality of performance by directions such as this: "Do the Forward Roll in good form." **In** case of indecision or dispute the leader should be the judge.

Illustrations of stunts which lend themselves well to this game are:

Top1

Dwarf Walk²

• RoIy-Poly³

Knee Dip"

Fish Hawk Dive⁵

Jump the Stick"

¹ Pearl, N. H., and Brown. H. E. *Off. cit.*, p. 95.

² Cotteral, B. and D. *Op, cit.*, p. 42..

³ *Ibid.*, p. 43.

⁴ Pearl, N. H., and Brown. H. E. *Op, cit.*, p. 96.

⁵ *Ibid.* • p. 96.

⁶ *Ibid.* p. 106.

Corkscrew₁

Tangle (see page ~03)

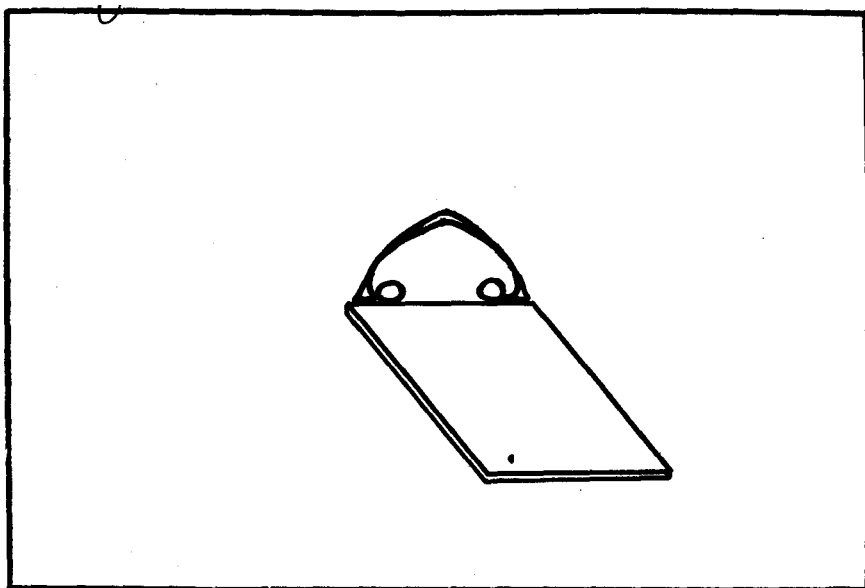
Folded Leg Walk₂

The pianist should determine the amount of music to play and guide her playing by the progress of a particular couple so that each time she ceases every player will get a new opponent. If a pianist is not obtainable, the leader can direct the game by using a whistle as the signal to stop.

LONDON BRIDGE

A SINGING GAME

Zukie Weems



Players: even numbers; two players forming the bridge. •

Equipment: a long mat.

Words. London bridge is falling down,
 Falling down, falling down,
 London bridge is falling down,
 My fair lady.

¹ Pearl, N. H., and Brown, H. E. *Op. cit.*, P. 99.

² Cotter al, B. and D. *Op. cit.*, p. 43.

Two players, preferably the same size and reasonably tall, are chosen by the group as captains and form the "bridge" on the mat as follows:

They stand on opposite sides of the mat, backs toward each other, then lie down on their backs with heads and shoulders resting on the mats. There should be a distance of at least three feet between the heads. They then extend their legs in the air and over their heads until the weight of the bodies is resting on the upper trunks. The upper arms are placed on the mats at the sides of the bodies, the forearms are raised at right angles, and the hands are held against the ribs, thus, acting as supports to the body. The players separate the legs sideward from the hips and touch each other's feet if possible.

As the group sings, "London Bridge is falling down," the players in a file formation skip to the bridge and do a Forward Roll between the two bodies. As the last lines are sung, the bridge falls around the rolling player. This is accomplished by the captains bending the hips and lowering the legs encircling the player. The captains then give the player the choice of two stunts agreed upon beforehand, as: "Do you prefer a Headstand or a Cartwheel?"

The player chooses and stations herself near her respective captain. The game continues until all players are caught and have chosen sides.

The two teams then compete in a team stunt, to determine the winner. Suggestions for the team competition are:

Skin the Snake, for speed
Walking Chair Race

Teaching Suggestions: The team stunt should be determined by the age level and ability of the students. It is possible to have the two choices of stunts serve as the team stunt. For instance, if group A represents the choice of Headstand, and group B represents the Cartwheel, all players in group A who can do a Headstand receive a point, and all players in group B who can do the Cartwheel receive a point. The group having the greatest total of points wins the contest.

'NOTES'

A MUSICAL GAME

Players: preferably eight players in each group ; as many groups as desired.

Equipment: mats for each group; piano. See diagram for Show Me, page 242.

Officials: a leader for each group.

Eight players stand side by side in a straight line at the sides of long mats. Each is given the name of a note on the scale by the leader. The pianist plays the respective notes on the piano so that each player can recognize them.

The game begins by the pianist striking a note on the piano. As the note is heard, the players in each group who represent the note must roll across the mat. The pianist continues to play the notes of the scale in varying sequence with a short interval between each, and the respective players must recognize the notes and roll in turn. After taking a Forward Roll across the mat, a player stays in that position until the particular note is sounded again, at which time a Backward Roll is taken. Thus, a player alternates back and forth across the mat.

A player failing to roll when the respective note is played, or rolling when some other note is played, receives a penalty of a quarter note. Four quarter notes equal a whole note. A player receiving a whole note must run down the scale as a final penalty. This is accomplished as follows:

The player starts at one end of the mat and does a Continuous Forward Roll down the length of the mats. The other members of the group stand at the side of the mats, and may spank the rolling player.

The leader of each group judges whether a player rolls at the proper time and keeps account of the penalties.

After a player has paid the penalty of receiving four quarter notes, the game starts over again and all previous penalties received by any player are cancelled.

3. To be safe from being tagged a player must have all parts of the body completely beyond the line.

4. After once leaving the line to cross over, a player may go back to it to prevent being tagged.

5. A player may become "It" automatically for not doing the walk called for.

Teaching Suggestions: The space between the two lines must not be too great, as many of the animal walks called for are fatiguing. **It** may be desirable to have the students participate in making the rules of the game.

Suggested walks are:

Frog Hop, page 500.

Duck Walk, page 199.

Rabbit Jump, page 500.

Walrus Walk, page 199.

Monkey Walk,¹

Cat Walk, page 198.

Dog Run/

Crab Walk,¹1k,3

Cricket Walk,⁴

Variations: Each player chooses to represent an animal. "It" stands in the center of the space and calls the name of an animal. All players who represent that animal attempt to cross over without being tagged. Upon being tagged, a player joins "It." The original "It" continues to call an animal until everyone leaves the starting line. Then the game continues by "It" repeating the names, until all are caught. The last one caught becomes "It" for the next game. The players are permitted to choose to represent another animal for the new game.

¹ Cotteral, B. and D. *Op. cit.*, p. 41.

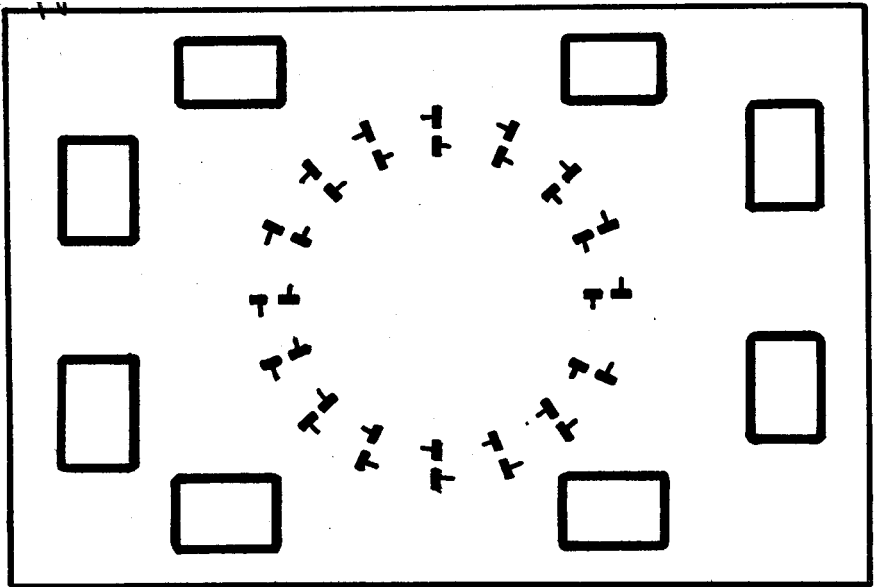
² Pearl, N. H., and Brown, H. E. *Op. cit.*, p. 95.

³ *Ibid.*, p. 96.

⁴ Cotteral, B. and D. *Op. cit.*, p. 42.

DOUBLE CIRCL~ STUNT GAME

A MUSICAL GAME



Players: even number of participants.

Equipment: mats scattered on the floor at a reasonable distance from the circles; piano, victrola, or whistle.

Official: one leader.

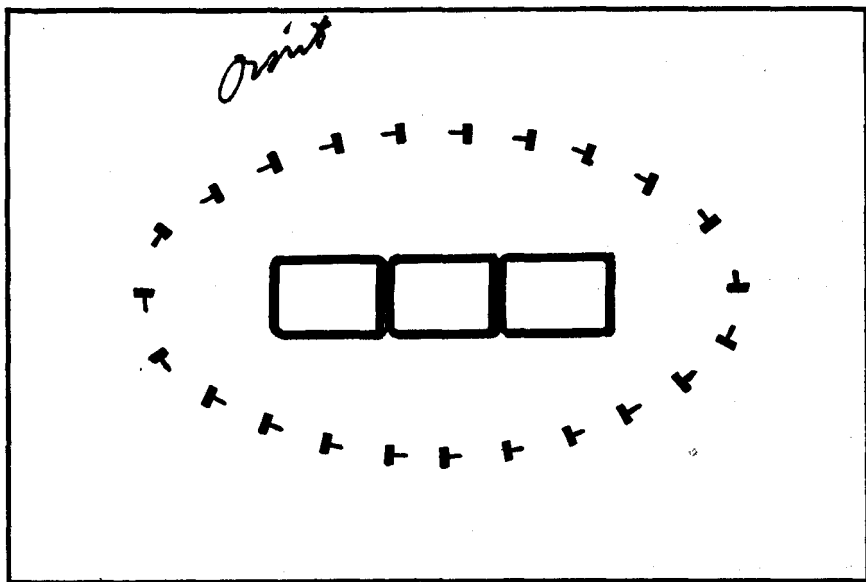
The players are organized into two teams, A and **B**, with a captain in charge of each. Team A forms a circle facing clockwise. Team B forms a circle on the outside of A's circle facing counterclockwise. Each player of team B stands at the side of a player of team A.

The leader stands in the center of the circle. As the music starts, the players in each circle march or skip around in the direction in which they are facing. Suddenly the music stops. Each player stops and reaches across to the opposite circle and grasps the hand of the nearest opponent.

The leader then announces an individual stunt and states the requirements for its successful performance. An illustration of such an announcement is, "The Tuck-Up, coming to a full

ROLL ALONG

A MUSICAL GAME



Players: any number; one leader.

Equipment: a long row of mats.

A long row of mats is placed on the floor. All players, except the leader, stand in a circle formation around the mats, facing counterclockwise. Each player should be at least three yards from the mats, and at least one yard from the player in front. The players make a cross with chalk on the floor in front of them and take a standing position on it. They raise left arms sideward.

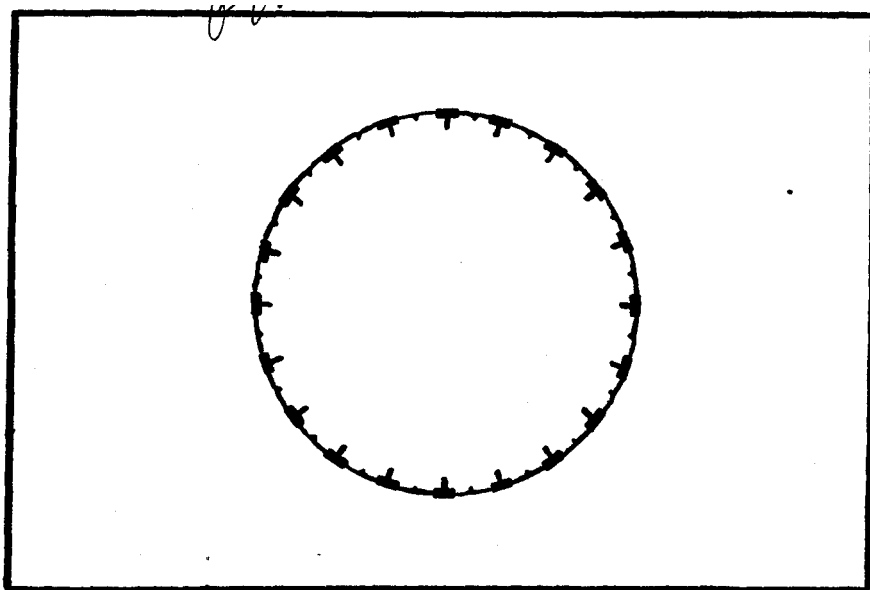
As the music starts the leader skips around on the inside of the circle in a counterclockwise direction and, choosing a player by grasping the extended hand, skips to the mat. Both players ungrasp hands, and side by side do a Forward Roll across the mat; then, grasping hands again, continue to skip around, the leader ahead of the second player. This time the second player chooses a player from the circle to join their line and the trio skip to the mat and roll across. The action

continues, the last player always choosing some one who joins the file, and the group rolls. Suddenly, the music stops, and players on the inside of the circle must run to an unoccupied chalk mark, and all players who have been standing on a chalk mark must change and get a new one. The player who does not obtain a mark becomes the next leader, and the game continues.

Teaching Suggestion: The game offers opportunity for taking Forward Rolls with groups. The leader should be coached to give a signal for the Roll if her group increases, and each player coached to time her Roll with others in the group. The game is an incentive to learn to roll accurately in a straight direction. With practice, the players can skip to the mats, roll across, join hands, and skip again, led by the leader, without breaking the rhythm of the music.

RUN THE SCALE

MUSICAL GAME



Players: even number of participants.

Equipment: piano, or whistle.

Officials: one or more leaders who, also, act as judges.

Players choose partners, and join hands in a circle facing inward. A leader stands on the outside of the circle. As the music starts the players march or skip, following the directions of the leader. A typical sequence of directions may be:

To the right
To the left
To the center
Out again

Finally, the leader calls: "Face your partner. Grand right and left."

The players, then, skip around the circle in the direction they are facing, giving alternately right hand and left hand to the players whom they meet. Suddenly, the music stops. All players stop skipping and rush to their original partners. Upon meeting, they quickly do the stunt, Run the Scale ¹ down and up as follows:

Partners stand back to back with arms locked. Keeping this position, they both sit down and extend their legs along the floor. They then get up together by pushing against each other's back.

The last couple to regain the standing position is eliminated by the leader.

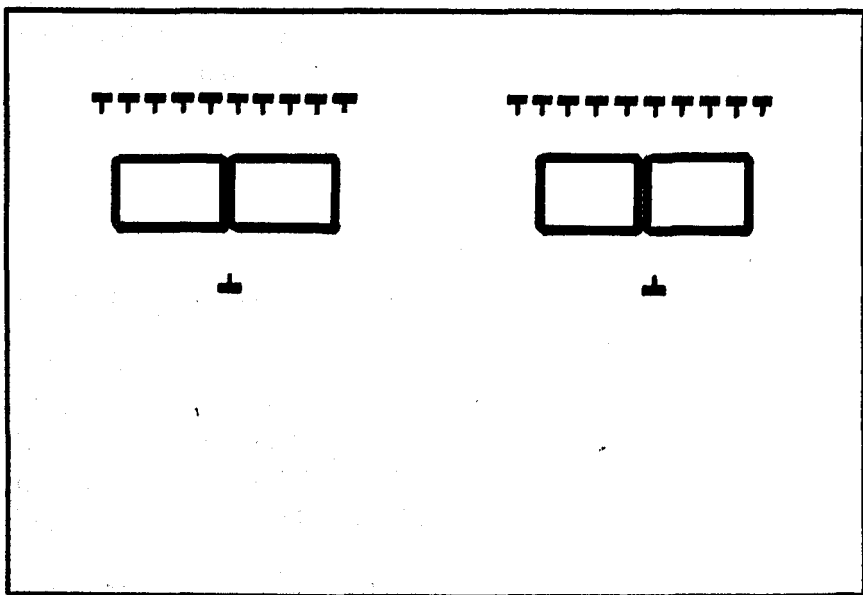
The game continues as before. Each time the music stops a couple is eliminated. The last couple to remain in the game is the winner.

Teaching Suggestions: If the circle is large, it is advisable to have more than one leader as a judge. The game is strenuous and, therefore, should not be continued too long. Two smaller circles, with leaders for each, may be more successful than a very large circle.

If a pianist is not obtainable a leader may direct the circle or circles by using a whistle as a signal to stop skipping and do the stunt.

¹Cotter al, B. and D. *Op. cit.*, p, 54.

"SHOW ME"



Players : any number.

Equipment: mats; other equipment available for various stunts.

Official: a judge.

The players line up side by side behind the mats. One player, as the leader, stands in front of the group, announces ~ stunt, stating definitely the requirements for the successful performance of it, and executes the stunt before the group. The leader then calls upon a player in the line to do the stunt. The player steps out in front and has one trial for the stunt. A person designated as a judge decrees whether the attempt is a success or failure. If the performance is scored a success, the leader joins the line of players and the successful player becomes the next leader. If a failure, the leader does another stunt and challenges another player. The game continues as long as desired.

Rules: 1. A player cannot be challenged twice in succession.

2. A leader failing to demonstrate the announced stunt gives up the place of leader to a desired player ..

3. The judge may rule out undesirable stunts.

4. The leader can challenge with a particular stunt only once.

Teaching Suggestions: Players should be classified into homogeneous groupings for this game. It can be played in small groups. Therefore, it is wise to group the skilled players together as one squad for the game, the students of medium ability in another squad, and those of little ability in another. The game sets a premium on skill and is justified once in a while in a course. Often a player becomes interested in improving skill in some stunt after failing in a challenge.

STUMPIN(;t

Players: any number.

Equipment: long row of mats; other equipment available for various stunts as wands, balls, paper, etc. See diagram for Show Me, page 242.

Official: a judge.

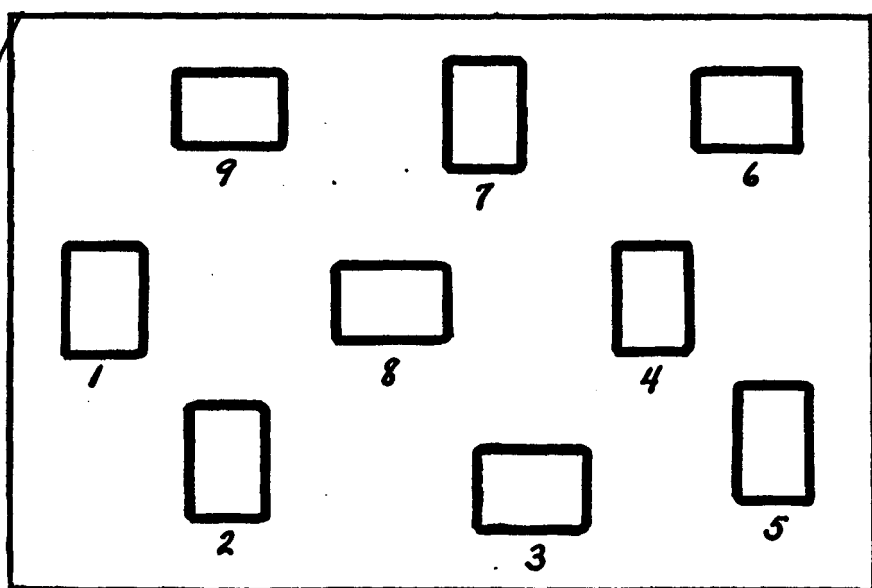
The players line up side by side behind the mats. The head of the line is designated. One player, as the leader, stands out in front of the group, announces the stunt, stating definitely the requirements for the successful performance of it, and executes the stunt before the group. Each player in turn, beginning with the one at the head of the line, is given one trial to do the stunt. The person acting as judge observes the performance and announces if the attempt is a success or failure. The players who fail to do the stunt successfully go to the foot of the line. After the last player has had a trial the leader announces another stunt, demonstrates it, and each player attempts it. If the head player does two stunts in succession, the leader goes to the foot of the line and the head player becomes the leader. The leader goes to the foot of the line, also, if the attempt to demonstrate the announced stunt results in a failure. The game continues as long as desired.

Teaching Suggestion: This game offers opportunity for a review of stunts learned. It recognizes the skillful performer.

The judge should be well qualified. It may be desirable to give the judge the power to eliminate from the game undesirable stunts. Children, when opportunity to display ability is given them, are very apt to imitate what they have seen on the stage. Extreme back bending stunts usually appear in this game unless discarded by the judge.

Stunts, the performance of which can be judged definitely as success or failure, are the eligible ones for the game.

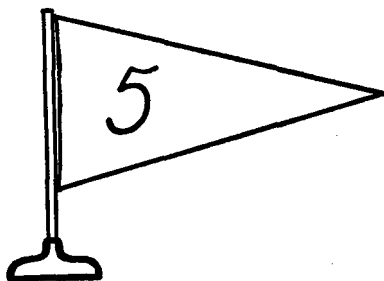
TUMBLING GOLF



Players: any number.

Equipment: mats, or space for stunts; apparatus available for stunts; set of directions for each stunt; a number for each stunt.

The tumbling golf course is laid out on the floor by designating places at which stunts are to be performed. These places, representing the "holes," are marked by numbers which are on cards placed on the floor, or on flags, either cloth or cardboard, placed in a small stand.



At each hole a sheet of paper is laid which gives directions for the accomplishment of the "hole." The directions include the name of the stunt or stunts, and detailed requirements for successful performance.

The players organize themselves into groups of twos, threes, or fours, for a twosome, threesome, or foursome. As a "hole" is approached, the directions are read, after which one student performs. An opponent judges the performance as success or failure, according to the criteria given in the directions, keeps account of the number of trials taken by the player, and records the score on the performer's score card. The opponent, in turn, becomes the performer. The players advance to each "hole" in sequence until they have completed the course.

After the course has been completed, the player *wins* who has the smallest total score.

Scoring: One point is given for each trial. If a player is having difficulty in performing the stunt, at least three trials must be taken before the player gives up. Failure after the third trial has the penalty of five points added to the three attempts, resulting in a score of eight for the "hole."

Teaching Suggestions: Tumbling Golf is suitable for an extracurricular program for tumbling, and, also, as an event on Play Day programs. The events should be adapted to the ability and experience of the students. There should be a range of easy to difficult ones. The type of stunts to be selected should be those, the performance of which can be judged decisively as success or failure by very definite requirements. Stunts which are judged on the basis of quality of performance are not serviceable.

It is not necessary for all students to start at "hole" number 1. They can be distributed around the course and from that point advance to the other "holes" in sequence, scoring their activity opposite the proper number on the card.

The stunts should be distributed well as to type. For instance, two stunts should not be in sequence which call for inverted positions, or two balance stunts should not come in sequence. Alternation of agility, flexibility, and strength stunts helps to secure the proper distribution.

The events may be either individual or combination stunts. If the latter are used, the stunts making the combination should glide into each other. For instance, if the Tangle is combined with the Forward Roll while holding to the feet, the player, coming out of the Tangle, is ready to do the Forward Roll.

Suggested Events:

Individual Stunts

Through the Stick.!
 Heel -Jump."
 Fish Hawk Dive,"
 Tuck-Up (see page ~04)
 Knee Dip.⁴
 Dwarf Walk.⁵
 Folded Leg Walk.⁶
 Cartwheel.⁷
 Roly-Poly.⁸

Combination Stunts

Backward Roll into a Headstand.
 Fish Flop, Jump Through Hands.
 Forward Roll on one foot, Single
 Squat.
 Tangle, Forward Roll holding to
 toes.
 Forward Roll, Backward Roll,
 Tip-Up.

¹Pearl, N. H., and Brown, H. E. *Op. cit.*, p. 98.

²*Ibid.*, p. 116.

³*tus*; p. 96.

⁴*Ibid.*, p. 96.

⁵Cotteral, B. and D. *Op. cit.*, p. 42.

⁶*tus*; p. 43.

⁷*tus*; p. 34.

⁸*tu*«, p. 43.

TUMBLING GOLF SCORE CARD

NAME _____

DATE _____

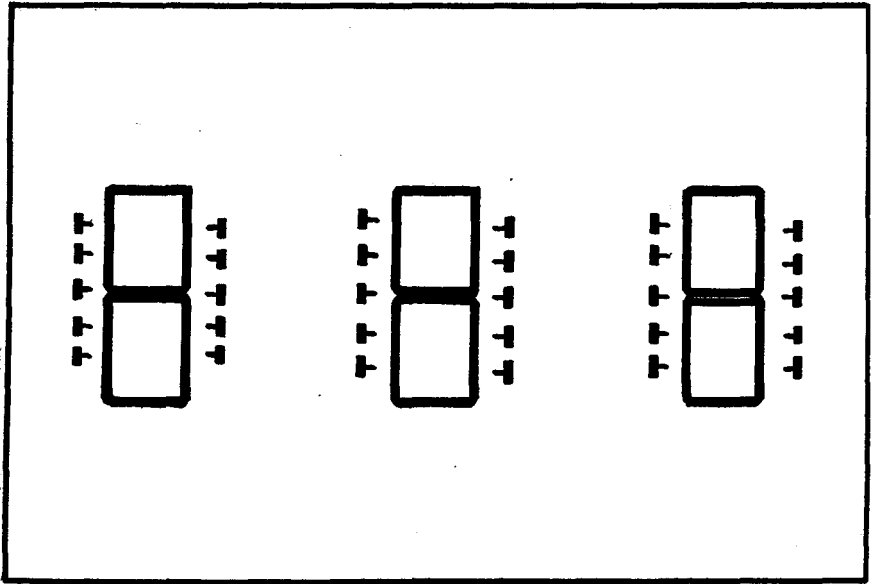
HOLE	SCORE
1	_____
2	_____
3	_____
4	_____
5	_____
6	_____
7	_____
8	_____
9	_____

TOTAL SCORE _____

SIGNED BY _____

TUMBLING REEL

A MUSICAL GAME



Players: even number.

Equipment: long line of mats.

This game is an adaptation of the Virginia Reel to tumbling. The players choose partners and line up along the mats, partners facing each other across the mats. The following sequence of stunts is suggested for the reel.

I. Greetings: The head lady and foot gentleman skip to the center, and shake right hands. Still keeping their hands joined, the head player lifts the right foot and the foot player the left foot, and, turning, they step over their joined hands. This places them back to back. Each continues to turn around to face front and lifts the other foot over the hands, which again brings them face to face. In this position they shake hands again, then skip back to their respective lines. The head gentleman and foot lady repeat the stunt.

II. Forward Roll: The head lady and foot gentleman skip to the center and do a Forward Roll when they meet. After

rising they skip backward to their places. The head gentleman and foot lady repeat the stunt.

III. Backward Roll: The head lady and foot gentleman skip to the center and, when they meet, turn around and do a Backward Roll. After rising, they skip forward to their lines. The head gentleman and foot lady repeat the stunt.

IV. Forward and Backward Roll: The head lady and foot gentleman skip to the center and when they meet do a Forward Roll. As they rise, they jump in the air taking a quarter turn right. They then take a Backward Roll across the mat. As they rise, they jump taking a quarter turn right. They are then facing the length of the mat and they take a Forward Roll. After a quarter turn right from a jump, they do a Backward Roll. This brings them to their starting point for the Rolls. They have traversed a square during their Rolls. They skip back to their places. The head gentleman and foot lady repeat the stunt.

V. Partner Roll: The head lady and head gentleman start at the end of the mats and take a Continuous Forward Roll down the length of the mats side by side. Variation for this part may be:

Cartwheel, partners facing each other.

Double Forward Roll.

Elephant Walk.

VI. Walking Chair: Each line forms the Walking Chair (see page 262), headed by the head gentleman and lady. They turn outward and lead their line to the head of the line, stopping in their original places with the rest of the partners back of them.

VII. Archway and Double Roll: The head couple join hands and raise their hands high. The other partners skip under the raised hands to their original places. They then lie down and form the Archway.¹ The head couple do a Double Forward Roll down through the Archway. The two then take their positions at the end of the line, the others stand up, and the game can be repeated with a new head couple.

¹Cotteral, B. and D. *Op. cit.*, p. 61.

UPS AND DOWNS

Arlis Ownby

Players: even number of participants.

Equipment: two long lines of mats parallel to each other; a square of very heavy cardboard, on one side of which is written the word "Up," and on the other "Down." See Diagram 10, page 100.

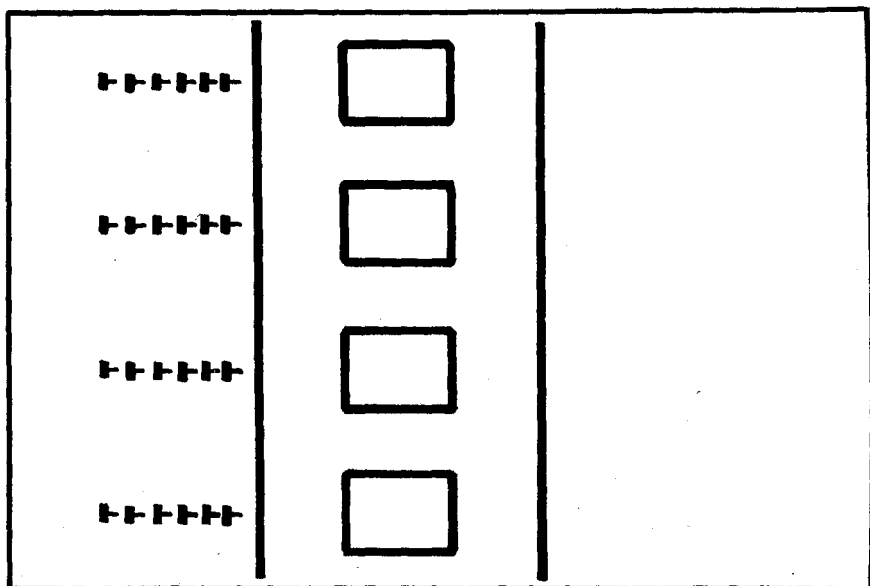
Official: one leader.

The players form two teams and line' up behind the mats, facing each other. One team is designated as the "Ups" and the other one the "Downs." The leader stands at one end of the mats in view of all players. To begin the game, the leader calls out the name of a stunt, as "The Soldier Roll," then flips the cardboard in the air. WhePt it lands on the floor, the team whose name is exposed on the card must attempt the stunt. Each player on the team in turn does the stunt, and the leader acts as judge. A player failing to do the stunt must go to the other team. The leader recovers the board, calls out another stunt, and tosses the card again. The game continues until a certain number of stunts have been called, the number being announced previously by the leader. At the end of the playing time the team wins which has the greatest number of players.

Teaching Suggestions: The stunts should be selected wisely according to the ability and experience of the students. There should be a range of difficulty in the stunts and, also, a range of type to be suitable to the various types of body build of the students.

B. STUNT AND TUMBLING RELAYS AND R-S

FORIVARD ROLL RELAY



Players: equal number on all teams.

Equipment: a mat for each team.

Official: a leader, who acts as starter and judge.

A starting line and a touch line are drawn on the floor with a distance of twelve yards between the two. Six yards *from* the starting line a mat is placed lengthwise on the floor for each team. The players of each team line up behind the starting line in file formation in line with their respective mat.

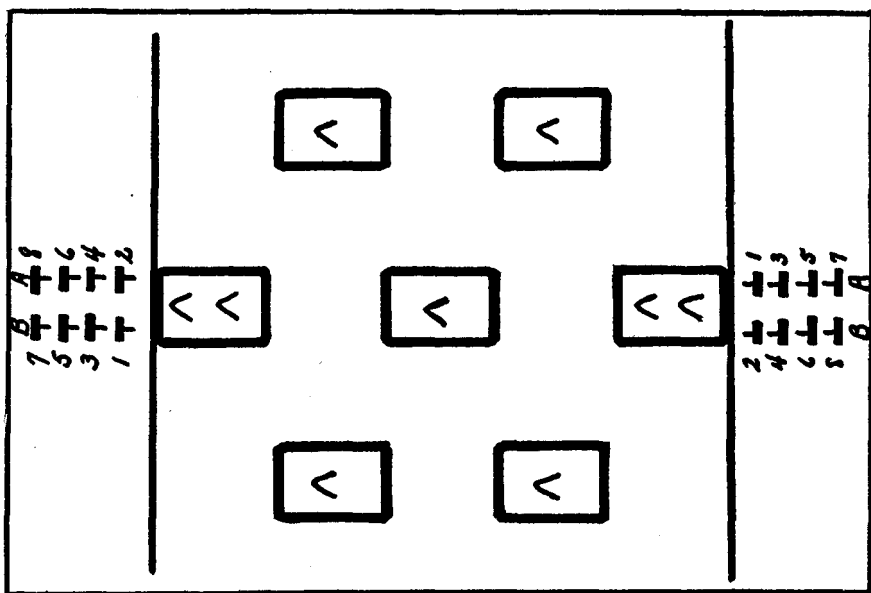
On the signal, "Go I", No. 1 runner of each team runs to the mat, does a Forward Roll, runs to the touch line, runs back to the file and tags No.2 runner, and, finally, goes to the end of the file. No.2 repeats the procedure, tagging No.3, and, thereafter, each member of the team runs in turn. The last runner tags **No.1**, who immediately raises the right hand in the air. The team wins whose No. 1 runner, after being tagged, first raises the hand in the air.

Teaching Suggestions: Only students should enter this relay who have mastered the Forward Roll, and have practiced doing it for speed.

A line on the floor should be used as the touch line rather than a wall, for there always is danger of injury to wrists and arms if a player runs swiftly into a wall. The line, therefore, should be at a reasonable distance from any obstruction.

Variation: This relay can be run in a shuttle formation. Half of the team, the odd numbers of the players, stand behind one line and the other half, the even numbers, stand behind the other line. The mats are placed in the center of the space between the two lines. No. 1 of each team runs to the mat, does a Forward Roll, and runs to the opposite side, tagging No.2, and then goes to the rear of the file. No. 2 runs, rolls on the mat, and tags No.3 in the opposite file. The race continues until the last runner tags No.2, who immediately raises the right hand in the air. The team wins whose No.2 player, after receiving the tag, raises the right hand first.

HUMAN WICKET RELAY



Players: nine players representing wickets; an equal number of players on two teams.

Equipment: a mat for each single and double wicket.

Official: a leader who acts as starter and judge.

Nine players are stationed on mats in the same formation as wickets for the game of croquet. Each player stands in a wide stride position. The two players at each end, representing the end double wickets, stand one directly behind the other with a distance of three feet between. The end players face the center and the side players face the far end players. The middle player may face either end.

Two teams, A and B, line up behind the starting line, as in the diagram. The odd numbers of team A are in file formation at one end of the court and, directly opposite them at the other end, their even numbered teammates stand. The formation of B's team is just reversed, the odd numbers standing at the end where A's even numbers stand and the even numbers standing beside A's odd numbers.

On the signal, "Go!", No. 1 from each team runs forward, crawls between the respective end wickets, then runs to the right and crawls between the respective right side wicket, runs and crawls through the center -wicket, runs to the right again and crawls through the right side wicket, runs and crawls through the end wickets and tags No. 2, and, finally, takes position at the end of the files. No. 2 from each team repeats the same procedure, always choosing the side wickets which are on the right hand. The race continues until all the players of one side have changed places and are standing in the opposite file. The team wins whose last player runs across the starting line and first stands in line behind the other teammates in the file.

Rules: 1. In case two runners get to a wicket at the same time, they will have to do the best they can to crawl through, or one will have to give precedence to the other.

2. The wickets must not lift their feet from the mat to aid the contestants.

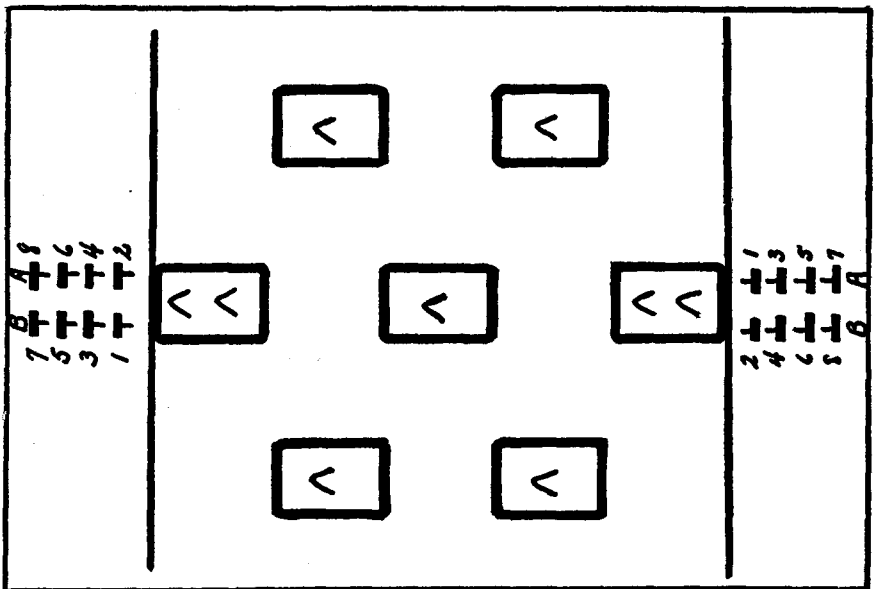
Teaching Suggestions: It is advisable to have the wickets standing on mats, for, otherwise, the runners are apt to get floor burns from sliding swiftly on the floor.

If desirable, two players may represent the center wicket.

A line on the floor should be used as the touch line rather than a wall, for there always is danger of injury to wrists and arms if a player runs swiftly into a wall. The line, therefore, should be at a reasonable distance from any obstruction.

Variation: This relay can be run in a shuttle formation. Half of the team, the odd numbers of the players, stand behind one line and the other half, the even numbers, stand behind the other line. The mats are placed in the center of the space between the two lines. No. 1 of each team runs to the mat, does a Forward Roll, and runs to the opposite side, tagging No.2, and then goes to the rear of the file. No. 2 runs, rolls on the mat, and tags No. 3 in the opposite file. The race continues until the last runner tags No.2, who immediately raises the right hand in the air. The team wins whose No.2 player, after receiving the tag, raises the right hand first.

HUMAN WICKET RELAY



Players: nine players representing wickets; an equal number of players on two teams.

Equipment: a mat for each single and double wicket.

Official: a leader who acts as starter and judge.

Nine players are stationed on mats in the same formation as wickets for the game of croquet. Each player stands in a wide stride position. The two players at each end, representing the end double wickets, stand one directly behind the other with a distance of three feet between. The end players face the center and the side players face the far end players. The middle player may face either end.

Two teams, A and B, line up behind the starting line, as in the diagram. The odd numbers of team A are in file formation at one end of the court and, directly opposite them at the other end, their even numbered teammates stand. The formation of B's team is just reversed, the odd numbers standing at the end where A's even numbers stand and the even numbers standing beside A's odd numbers.

On the signal, "Go!", No.1 from each team runs forward, crawls between the respective end wickets, then runs to the right and crawls between the respective right side wicket, runs and crawls through the center -wicket, runs to the right again and crawls through the right side wicket, runs and crawls through the end wickets and tags No.2, and, finally, takes a position at the end of the files. No. 2 from each team repeats the same procedure, always choosing the side wickets which are on the right hand. The race continues until all the players of one side have changed places and are standing in the opposite file. The team wins whose last player runs across the starting line and first stands in line behind the other teammates in the file.

Rules: 1. In case two runners get to a wicket at the same time, they will have to do the best they can to crawl through, or one will have to give precedence to the other.

2. The wickets must not lift their feet from the mat to aid the contestants.

Teaching Suggestions: It is advisable to have the wickets standing on mats, for, otherwise, the runners are apt to get floor burns from sliding swiftly on the floor.

If desirable, two players may represent the center wicket.

If so, they stand back to back, lock elbows, and place the feet same distance apart. They should be about the same size.

7

JUMP AND ROLL RELAY

Players: equal number of players on teams; number of teams limited by number of mats.

Equipment: a mat for each team. See Forward Roll Relay, page 251.

Official: a leader, who acts as starter and judge.

-A starting line and a touch line are drawn on the floor with a distance of twelve yards between them. Six yards from the starting line, a mat is placed lengthwise for each team. The last runner of each team kneels on hands and knees on the floor next to the end of the mat, which is nearest the starting line. If more than one mat is available for each team, the player kneels on a mat. The other members of each team line up behind the starting line in file formation in line with their respective mat.

On the signal, "Go!", the first runner of each team runs, jumps over the kneeling teammate, does a Forward Roll on the mat, runs and touches the touch line with the foot, runs back and tags the kneeling player, and takes the kneeling position of that teammate. The teammate, then, runs back to the file, tags No.2 runner, and goes to the rear of the file. No.2 runs, jumps over **No.1**, does a Forward Roll, runs to the touch line, returns to the mat, and, after tagging **No.1**, takes the kneeling position. No.1 runs to the file, and tags No.3. The race continues until No.1 is tagged by a runner, whereupon the right hand immediately is raised in the air. ~Then this happens, all the teammates are in their original positions with No. 1 heading the file and the last player kneeling on the mat. The team wins whose No.1 player, after being tagged, first raises the hand.

Teaching Suggestions: Before this relay is presented, the students should master the Jump and Roll as a stunt for accuracy and then practice it for speed,

After the jump over the kneeling person, the runner must land on both feet before going into the Forward Roll.

The runner should be coached to jump over the hips of the kneeling person rather than over the region of the upper trunk and head.

KANGAROO RELAY

Ruth Zimmerman

Players: even number of players on all teams.

Equipment: a soccer or volley ball and a mat for each team.

See Forward Roll Relay, page 251.

A starting line is drawn on the floor. In front of it, six" yards away a single mat is placed lengthwise for each team. Behind the starting line each team lines up in file formation in line with the respective mats. In front of the first player of each team a ball is placed on the starting line.

On the signal, "Go!", *No.1* of each team picks up the"ball, and, placing it between the knees, advances to the mat with successive jumps from both feet and does a Forward Roll. The player rises with the ball still between the knees and jumps back to the file to *No. 2* teammate. *No. 2* takes the ball from between *No. .1's* knees, advances with it between the knees to the mat, and rolls. The race continues until the last player has jumped back to the file. The team wins whose *No. 1* player first holds the ball in the hands.

Rules: 1. Each player must stand behind the starting line when receiving the ball from another player, and must start from behind the line.

2. If a ball is dropped while the player is jumping, it must be picked up and the jump continued at the spot where the ball was dropped.

3. If the ball is dropped during the Forward Roll, the Roll must be taken again.

4. The hands may be used on the ball while jumping or rolling only when the ball is dropped. They cannot touch the ball to adjust it or hold it from dropping.

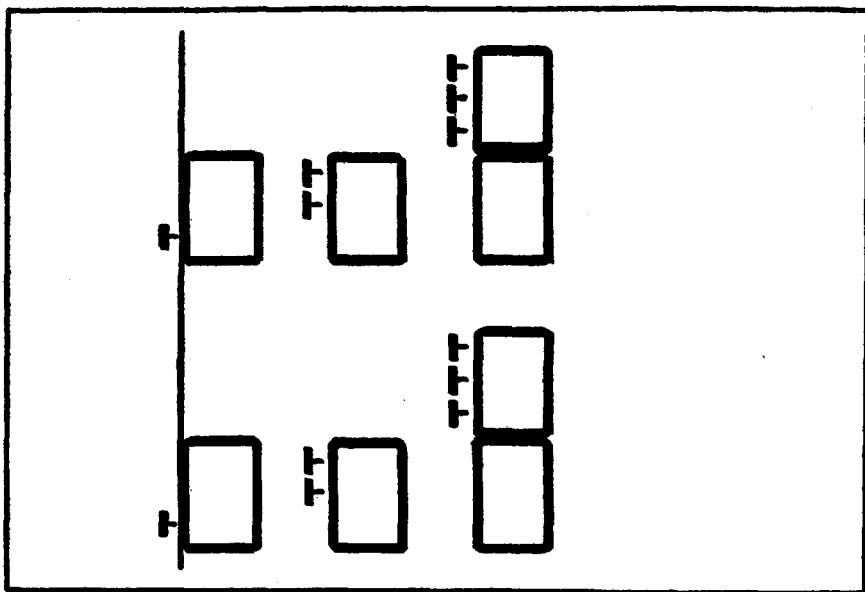
Penalty: Failure to observe the above rules disqualifies a team from the race.

Variation: The relay may be in the form of a shuttle relay. Half of the players, the odd numbers, stand in a file at a distance of six yards from the mat, the other half, the even numbers, stand in a file the same distance from the opposite end of the mat.

No. 1 jumps with the ball to the mat, takes a Forward Roll with it, then jumps to the opposite file. No. 2 takes the ball from No. 1 and No. 1 goes to the end of No. 2's file. No. 2 jumps and rolls, and jumps to No. 3 at the opposite end of the mat, and goes to the end of that file. The race continues until all players have changed files and No. 2 is holding the ball after receiving it from the last player.

ONE, TWO, THREE, RELAY

Blix Hankins



Players: the number depends upon available mats.

Equipment: at least four mats for each team.

Official: a leader who acts as a starter and a judge.

The mats are placed on the floor for each team as shown

in the diagram. Mat No. 2 is placed in line with mat No. 1 and at a distance of nine feet away. Mats No. 3 are placed so that one is in line with mat No.2 and nine feet away, and the other to the left side of it. No.1 player of each team stands near the right side of mat *No.1*; Nos. 2 and 3 players near the left end of mat No.2; and Nos. 4,5, and 6 players at the left half of mats No.3.

At the signal, "Go I", *No. 1* of each team does a Forward Roll, and runs to mat No.2. *No.1* then calls out a signal, "Go!", and players **No.1**, 2, and 3 roll. They then run in a line to mats No.3, and, upon *No. 1's* signal, all players, 1, 2, 3, 4, 5, and 6, roll and come to a stand. The team wins whose players are first to rise from the Team Roll and are standing side by side.

Teaching Suggestions: Team Rolls should be mastered before this relay is presented. *No. 1* should be a player who likes to roll, for in that position three Rolls are taken in succession. *No. 1* must be coached to give the signal, "Go !", loudly and clearly, and at the proper time. Some players are apt to start rolling before they call out the signal to their teammates. Teams can be given time to practice the race and organize for it before they compete against other teams. Coach them to work for accuracy first before attempting speed. Cooperation among the players and timing to do the Rolls together save time and are much more apt to bring success to the team.

Variations: 1. The description above called for six players. This number can be increased easily if desired. Two players might start at mat No. 1 and the number increased accordingly at each mat if there are available mats for the Team Rolls.

2. The finish of the game may be varied. As soon as all the players at mat No. 3 have come to a stand from their Roll, they jump completely around to face the mats again and, upon signal of *No.1*, take a Team Roll across the mats. Then, Nos. 4, 5, and 6 stay at their original places and Nos. 1, 2, and 3 run to mat No.2 and roll across. Nos. 2 and 3 are now in their original places and *No.1* runs and rolls on mat No. 1. The team wins whose first player crosses the end of the mat standing up.

This variation requires No. 1 to do six Rolls, and Nos. 2 and 3, four Rolls. Therefore, players for those positions must be ones who are not disturbed by a succession of Rolls.

ROLL BALL RELAY

Mary E. Bellenger

Players: odd number.

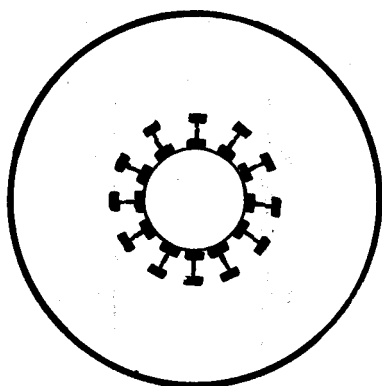
Equipment: a row of mats and a basket ball or soccer ball for each team. See 'Forward Roll Relay, page 251.

Official: a leader, who acts as starter and judge.

The teams line up in file formation at one end of their respective mats. No. 1 holds a ball. As the signal, "Go!", is given, No. 1 does a Forward Roll with ball in the hands, rises, and rolls the ball back between the legs to player No. 2, then runs to the opposite end of the mats, and stands facing the file of players. In the meantime, No. 2 dives over the rolling ball, and takes a Forward Roll, then runs to stand behind No. 1. No. 3 catches the ball that was rolled by No. 1 and, holding it in the hands, does a Forward Roll, then rolls the ball between the legs toward No. 4, and lines up behind No. 2. No. 4 dives over the rolling ball and joins the preceding group. No. 5 catches the ball and rolls with it. The game continues until the last odd player catches the ball, rolls with it, and runs to take a position behind the other teammates. The team wins whose last player gets into position in the file first.

Teaching Suggestions: This relay requires skill and should be given only after the Rolls with dives are learned. See page 174 for instructions.

THE SCOOTER RACE



Players: even number.

Equipment: none.

Officials: a leader, who acts as a starter; several judges.

On the floor a circle is drawn, the circumference of which represents the starting line for the race. It must be large enough to permit room for all the contestants to take their starting positions inside the circumference. Six yards from this circle a much larger concentric circle is drawn, the circumference of which represents the finish line for the race. Partners assemble within the starting circle and take their positions for the Scooter. See page 209. Both partners must be completely inside the circle with no part of the body touching the starting line.

On the signal, "Go!", all contestants "scoot" across the space toward the finish line. The couple wins who first touches the finish line.

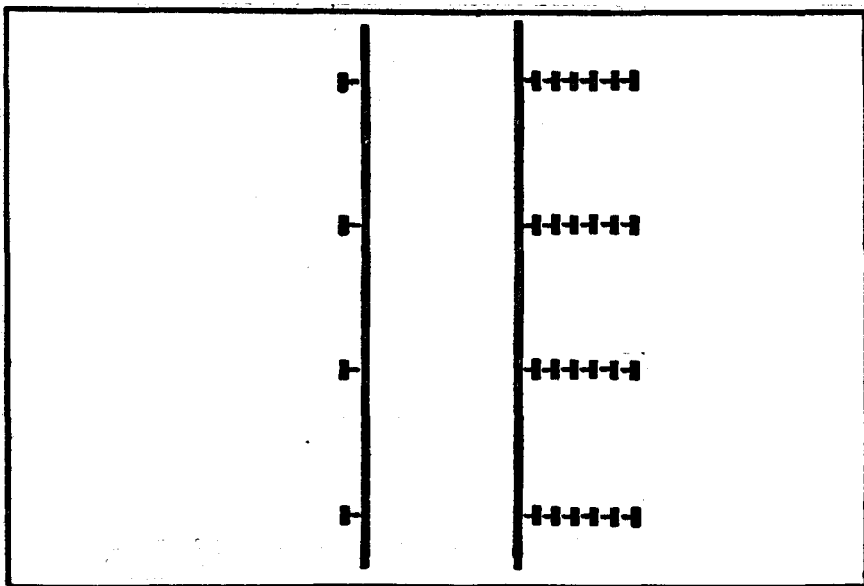
Teaching Suggestions: If there are many contestants, it is best to have several judges stationed at various points around

the circle. The distance between the two circles should not be too great, for fatigue comes quickly to the contestants.

Variation: Instead of circles, a starting line and finish line can be drawn parallel to each other.

SCOOTER RESCUE RELAY

Grace McMillan



Players: any number. Teams must have an equal number.

Equipment: two lines drawn on the floor.

Official: a leader who acts as a starter and a judge.

Two lines are drawn on the floor parallel to each other with a distance of five yards between them. No. 1 stands behind one line, facing the other teammates, who are behind the other line in file formation.

At the signal, "Go!", No. 1 runs across and makes a Scooter, (see page 209), with No. 2. They scoot across the space until both are behind No. 1's original starting line. No. 1 stays behind the line, and No. 2 runs across and scoots back with No. 3. No. 2 lines up behind **No. 1**, and No. 3 runs across and scoots with No. 4. The game continues until the last player is scooted across, Both players making the last Scooter jump up and

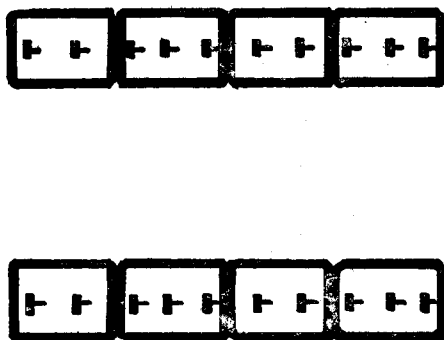
line up behind the others. The team wins whose players are first to be lined up one behind the other.

Teaching Suggestions: Have the students work out the most efficient method of making the Scooter with as little waste of time as possible, and, also, of jumping up from the Scooter, allowing the next runner to get away quickly.

The distance between the two lines may vary some with the age of the players. However, it must be reasonably short, as fatigue sets in quickly.

SUBMARINE ROLL RELAY

Arlis Ownby



Players: number restricted by available mats. All teams must have equal number.

Equipment: a long line of mats for each team.

Officials: a leader who acts as a starter; judges.

The players of each team stand on the mats one behind the other facing one end. The first player must be at one end of the mats, the last player at the other end, and the rest of the players stationed at equal distances between the two. There should be at least four feet between each player.

At the signal, "Go!", No. 1 lies down crosswise of the mats and takes a Sideward Roll (see page 204), down the full length of the mats. Each teammate in turn leaps over the rolling player. When the end of the mats is reached No. 1 stands up, tags the last player.: who passes the tag to the next, the tag continuing up to the head of the line. No.2, after being tagged, lies at the end of the mat in No. 1's original position and rolls, the others leaping in turn. No.2, upon reaching the end of the mats, starts the tag. The game continues until all players have rolled. The team wins whose players arrive in their original positions first.

Rules: 1. A team is disqualified if the players do not keep the required distance between them.

2. The players must leap over the knees or lower legs of the rolling player, and not over the region of the trunk or head;

3. Each player must start the Roll from the end of the mats, and must roll to the opposite end of the mats, so there is a uniform rolling distance for all.

Penalty: a team is disqualified if its members do not adhere to the rules.

Teaching Suggestions: This relay should be given only after the Sideward Roll can be done smoothly and accurately, and the jumps can be timed properly.

WALKING CHAIR RACE

Players: equal number on all teams.

Equipment : none.

Official: a leader who acts as a starter and a judge.

A starting line and finish line are drawn on the floor parallel to, and at a distance of six to nine yards from, each other.

To form the chair, the members of each team get in a file formation behind the starting line, standing very close together. Each player places the arms around the waist of the player in front.

On the signal, "Go!", all members of each team bend their knees and take a sitting position on the knees of the player

behind. The teams then walk forward starting with the left foot. The team wins whose first member touches the finish line.

Rules: A team is disqualified if:

1. The members do not keep the sitting position throughout the race.
- ~. A member breaks hold of the player in front.

Teaching Suggestions: If there is a range of size among the players on a team, it is more advantageous to place the tallest member in the back. Let the students first experiment with the Walking Chair. They will find it is necessary that all members start with the same foot and keep in step. Smaller steps are better than larger ones.

CHAPTER XII

STUNT. AND TUMBLING CONTESTS

CONTESTS In tumbling, if administered well, have distinct contributions to make. They appeal to the interest of the students, and, because of their competitive nature, they promote effort on the part of the students to learn new activities and to improve in performance. They serve well as a means for reviews in activities. And, lastly, if directed efficiently they offer excellent opportunities to inculcate valuable social attitudes such as good sportsmanship, fair play, tolerance of opponents, and loyalty to teammates.

The contests suggested in this section are less formal than the tumbling meet which is described in Chapter XIII. They lend themselves well for competitions among students within a class period, or for extracurricular programs. They, also, serve well as lead-up experiences to a formal tumbling meet. They are adaptable to elementary, high school, and college groups.

The contests are classified into two groups: (1) group contests; (2) individual contests. The group contests offer greater opportunities for social outcomes than the individual contests, for the individual's performance contributes to the group of which he is a member.

GROUP CONTESTS TEAMNUMBERCONTEST

Contestants: " " al number for all teams, if possible. Number of teams optional. A captain is in charge of each team.

Suggested formation on the floor: 11, 12, or 14, pages 101, 102, 104.

Officials: a leader, judges if desired, and a score keeper.

Each captain gives the members of the team a number

secretly, the range of numbers being equal to the number of contestants on the team. If one team has one less member than the others, one contestant is given two numbers.

The leader of the contest announces a stunt and gives complete and detailed requirements for the successful performance of it. The leader then calls out a number within the range of the number of contestants on each team. The contestant from each team who has been given that number by the captain rises and in turn attempts the stunt.

The judges declare the performance a success or a failure. If the stunt is performed successfully the contestant scores one point for the team. A score keeper records the scores. If none of the contestants called upon can perform the stunt the leader may call out another number and the corresponding contestants attempt it, or the leader may announce a new stunt and call another number.

The contest continues as long as desired. At the end the team wins which has the greatest total of points.

This is an excellent contest for the review of stunts previously learned. It has a game element in it due to the chance involved in calling numbers, and it is more or less informal. It is a popular contest with students. It, also, stimulates the students to practice and perfect stunts, which they may have a tendency to avoid, due to inability to perform them at the first attempt.

Teaching Suggestions: This type of contest calls for activities, the performance of which is definitely a success or a failure. Stunts are feasible events.

As the activities are chosen for the contest, it is desirable to have the various types of stunts represented. See page 114.

Heterogeneous squads may be the unit of organization.

" The instructor may adapt the rules to the needs of the class. For instance, it may be advisable to give each contestant two trials for each stunt, if the contestants are inexperienced.

The leader should have the stunts written down in the order in which they are to be given, and, also, the requirements for each stunt completely written. The leader can spoil the spirit

of the contest by being indefinite or incomplete in the directions for the performance of the stunt, and, therefore, cause dissatisfaction among the contestants by the verdict as to the success or failure of the performance.

The leader should check off the numbers called so that each contestant has an equal number of turns. It makes a more interesting contest if the leader does not call the numbers in sequence, thus keeping the contestants in suspense as to what number is to be called next.

Y TEAM EFFICIENCY CONTEST

Contestants: equal number for all teams. Number of teams optional. A captain is in charge of each team.
Suggested formation on floor: 11, 12, or 14, pages 101, 102, 104.
Officials: leader, judges, and scorers.

The object of this contest is to have as many members of each team as possible perform successfully the events.

The events may be chosen before the contest and each team given a certain amount of time in which to prepare its members for the contest, as perhaps, a week, or even a month, or the events may be disclosed only at the time of the contest.

In either case, the leader announces the event and one team is called upon to perform it. Every member on the team who successfully performs the activity scores a point for the team. Each team participates in turn. The leader calls upon a different team each time to be the first to attempt the new activity. At the end of the contest the team wins which has the highest total of points.

This contest promotes interest in improvement, as anticipation of it often inspires members of a team to put forth greater effort to improve in order to contribute to the team. Teammates will help each other to become efficient.

Teaching Suggestions: Heterogeneous teams serve as an efficient type for this contest.

The contest may be of the type which includes activities, mainly stunts, the performance of which is judged as success or

as failure, or it may include activities which are judged on the basis of quality of performance.

It is possible to include couple stunts as well as individual stunts.

The events should represent a range of elements, such as agility, balance, flexibility, and strength, rather than emphasizing just one.

Students may be interested in selecting the events for the contest.

fi. TEAM CHALLENGE CONTEST

Contestants: an equal number on two teams, A and B. A captain is in charge of each team.

Suggested formation on the floor: II, 12, or 14, pages 101, 102, 104.

Officials: judges and scorer.

The captain winning the toss of a coin has choice of the team to be the challenger or the one receiving the challenge. The contest begins by No. 1 of the challenging team announcing a stunt, giving detailed performance of it, and executing it before the contestants. The captain of the challenging team then challenges a member of the opposing team to do the stunt. The challenged player is given one trial for the stunt.

The judges decree whether the attempt is a success or failure. If a success, the challenged contestant's team scores one point. If a failure, the challenging team scores one point. If the challenging contestant fails in the demonstration the challenge immediately passes to the opposing team. Otherwise, the challenge alternates from one team to the other in order until every member has had a turn. The team wins which, after the last challenge, has the greatest number of points.

Rules: 1. A player cannot be challenged twice in succession.

2. A team may challenge with a particular stunt only once.

3. A judge may rule out undesirable stunts and may require more explicit explanations of a stunt if necessary.

Teaching Suggestions: Homogeneous teams with an equal range of ability are best suited for this type of contest.,

It is possible to submit to the teams before the contest a range of events from which challenges are to be chosen.

It is possible to set up certain standards which serve as criteria by which to judge the eligibility of a stunt in the contest. For instance, no stunt shall require severe back bending.

"TEAM REPRESENTATIVE CONTEST

'ContestantS: distributed equally on as many teams as desired.

A captain is in charge of each team.

Suggested formation on floor: 11, 12, 13, or 14, pages 101-104.

Officials: instructor as leader, and judges, if desired, and a score keeper.

The nature of this contest calls for tumbling events, the performance of which can be judged on the basis of quality of performance. The instructor announces a stunt and states the requirements for the successful performance of it. Each team is allowed a certain number of minutes in which to practice it or to perform it after which time the captain selects a contestant to represent the team. In case a couple stunt is announced, two contestants are chosen.

The leader then calls the representatives to the center of the room and each competes in turn.

The performance is judged on the basis of quality of performance. See page 275 for a suggested scale for judging quality of performance. Each contestant, then, according to the score gained by the performance is given a rank and a numerical score depending upon the number of teams competing. That is, if there are four teams, first place receives four points; second place, three points; third place, two points; and fourth place, one point. Below is a sample score sheet.

The contest then continues with other stunts announced and the same procedure followed. At the end of the contest the team wins which has the greatest total of points. On the score sheet, Chart XI, Team III is the winner.

CHART XI

SUGGESTED SCORE SHEET FOR TEAM REPRESENTATIVE CONTEST

EVENTS	TEAM I	TEAM II	TEAM III	TEAM IV
Backward Roll	4	3	2	1
Headstand	1	4	3	2
Double Forward Roll	4	3	2	1
Handstand	1	2	4	3
Swan Balance	1	2	3	4
Cartwheels	2	3	4	1
Total	13	17	18	12

Rules of the Contest: 1. Each member of a team must compete at least once.

2. No member of a team may compete more than a designated maximum number of times. This number depends upon the number of events and the number of students on a team.

3. If a team has no representative who can perform the stunt no point is scored.

4. In case a contestant fails to perform an activity, a substitute is not permitted.

Teaching Suggestion: If heterogeneous teams are competing against each other, the range of difficulty of the events should be large enough to make it possible for all students to participate in some of them.

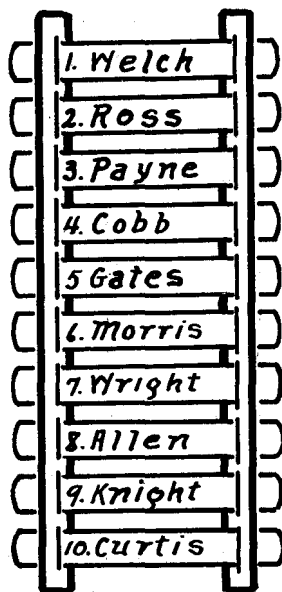
It is possible to include group stunts in this type of contest. Such events often will provide opportunity for the less skilled students to participate.

If the list of events is not disclosed before the meet, it adds interest on the part of the students.

Interest is added if a new stunt is presented in the contest sometimes. In this case, the leader announces the stunt, explains and demonstrates it. The teams are given a certain amount of time to practice it.

B. INDIVIDUAL CONTESTS

LADDER CONTEST



Equipment: a ladder, drawn on a cardboard or made of cardboard. **In** the sides of the ladder are slits into which the rounds of the ladder are inserted. At the side of the ladder numbers are placed consecutively at the place of each round, beginning with No. 1 at the top. A corresponding number is placed on each round.

Contestants: any number. A small group is preferable to a large group.

Officials: a leader, and several judges.

The object of the contest is for each individual to climb as high as possible on the ladder.

The individuals in the contest draw a number, which is within the range of the number of contestants. The number drawn represents the round of the ladder on which the individual starts the contest. For instance, the illustration above shows that contestant Allen has drawn round No. 8 in a contest in which there are ten contestants.

The instructor announces the name of a stunt and gives the specific requirements for its performance. Time then is given in which each student attempts to challenge the student on the next round above or not more than two rounds above. When a challenge is given it must be accepted. For instance, No. 8 has privilege of challenging either No.7, or No.6. If, however, No. 10 challenges No.8, No.8 has to accept the challenge and, therefore, cannot challenge above.

When all challenges are given and accepted, upon the signal of the instructor, each student performs the stunt in turn before a judge. If the student challenged fails to do the stunt and the challenger performs it successfully, the challenger exchanges places with the challenged. If the challenged student performs the stunt successfully and the challenger fails, or if both perform the stunt successfully, they keep their respective places on the ladder.

After the stunt is attempted by all, the rounds of the ladder are adjusted, after which another stunt is announced and new challenges are made. The contest continues as long as desired.

Teaching Suggestions: This contest is adapted best to homogeneous groupings. It is more suitable for small classes. However, it is possible to divide the class into homogeneous groups and have a ladder tournament for each group.

It is necessary to select stunts, the performance of which can be pronounced decisively as success or failure.

There should be a variety of types of stunts covering the demand of agility, flexibility, balance, and strength.

The ladder contest may be concluded within one day's period, or it may be extended over a certain period of time.

STUMPING GAME

See page 242 for description.

TUMBLING GOLF

See page 244 for description.

CHAPTER XIII

STUNT AND TUMBLING MEETS

IN recent years tumbling meets have become popular. They are being included, not only as a part of the tumbling class program, but also as part of the extracurricular program, including intramural, athletic association, and Play Day activities.

In this chapter the word meet is used to denote "an organized meeting of contestants for the purpose of having a competition in several events in the same program."¹

Stunt and tumbling meets may be classified into the following types:

1. Individual meets. This is a type of meet in which each participant competes for himself against other participants.
- ~. Team meets. In this type of meet the scores of each participant contributes to the total score for respective teams. A team consists of more than one individual.

In this chapter both types of meets are considered.

A stunt and tumbling meet may consist of some or all of the following classifications of events. The term event is used to denote the activities in which the participants of the meet compete.

- (1. Compulsory events. These are events which are agreed upon
 \ by the contestants before the meet, and are required of all or
) a certain number of participants.
- " ~. Optional events. These are events which are selected by an
 individual participant or a group. Usually a certain number
 of optional events are permitted or required.
13. Original events. These are events which are the creation of
 an individual participant or a team.

¹Bowen, W. P. *Conduct of Physical Activities*. New York, A. S. Barnes and Co., 1927, p. 93.

4. Challenge events. These are events which one participant or team performs or demonstrates and challenges the opponents to perform. The events may be original or nonoriginal.

Unlike other types of meets in the physical education program, stunt and tumbling meets have been characterized by a lack of a standard method for judging and scoring events. For the most part, it has been necessary for those in charge of such meets to improvise methods to meet local needs. This has been due mainly to the fact that very little has been published in regard to methods of judging and scoring events in stunt and tumbling meets. In this chapter a method is devised for judging and scoring such events.

A survey ¹ made of methods used or advocated for judging and scoring competition in types of activities similar to tumbling, such as diving, gymnastics, dancing, calisthenics, revealed that scoring usually has been based upon the judgment of one or more of the following elements:

1. Quality of performance. A standard of excellence is established and the approximation of a performance to this standard is made by definite criteria. A common range for evaluating the quality of performance is from one to ten points.
2. Degree of difficulty. The relative difficulty of the activities is decided upon and stated in terms of a numerical value. This rating is multiplied by the quality of performance score in optional events.
3. Success or failure. The activity is judged by definite criteria as either performed or not performed. This method is used mostly for judging stunts.

As a result of this study, the following methods are advocated for judging and scoring events in stunt and tumbling meets.

- /L** Compulsory events: Quality of performance with a range of ten points for scoring.
- \ if) ~.** Optional events: Degree of difficulty, as stated in terms of a

¹Cottarel, B. Methods of Judging and Scoring Events in Tumbling Meets. A Study Made at Teachers College, Columbia University, New York City, 1931.

numerical rating, multiplied by the quality of performance
... score.

- S. Original events: Quality of performance, multiplied by the degree of difficulty.
4. Challenge events: Quality of performance, multiplied by the degree of difficulty.

The adoption of these methods necessitates: (1) the construction of a scale for judging quality of performance; (2) the establishment of relative difficulty of stunt and tumbling activities, and the computation of a numerical rating for each. These two phases are discussed in the following sections.

I. Scale for Judging Quality of Performance

As a basis for the judging of quality of performance of a stunt and tumbling event, a scale of ten points is devised. These ten points are distributed into units as follows:

- 10-excellent performance.
- 7-9-good performance.
- 4-6-average performance.
- 1-3-poor performance.
- 0-performance completely failed.

The criteria selected for judging the quality of performance are:

- Relaxation
- Control of the body
- Technique
- Accuracy
- Timing or rhythm
- Approach
- Finish

With these criteria in mind the scale for judging the quality of performance, Chart **XII**, is advocated. It can be used for both individual and group events.

CHART XII

SCALE FOR JUDGING QUALITY OF PERFORMANCE

0	1-3	4-6	7-9	10
FAILED	POOR	AVERAGE	GOOD	EXCELLENT
Activity not accomplished.	Activity barely accomplished. Lack of control. Deficient technique used.	Fair performance. Activity accomplished, but as a whole, shows a lack of finish in most details.	Above average, but not a finished performance. Lack of excellency in one or two details.	A finished performance. Body relaxed and completely controlled. Proper technique applied. Accuracy obtained. Correct timing or rhythm. Excellent approach and finish.

II. Establishment of the Degree of Difficulty of Stunt and Tumbling Activities

Judging and scoring optional events by degree of difficulty requires: (1) ranking activities according to relative difficulty; (2) obtaining a numerical score for each activity according to rank.

The ranking of stunt and tumbling activities according to difficulty would vary with different age groups and different sexes. As yet, no study has been made of the difficulty ranking of stunt and tumbling activities for elementary and high school students.

Tables I and II, Column I, pages 277-280, show the rank given by a group of teachers to sixty individual and forty group activities, according to the relative degree of difficulty for college girls. Although originated for college girls, it is possible for the list to be used in stunt and tumbling meets for senior high school girls, as there is not a great range of difference in the type of ability between senior high school and college levels.

The ranking was made with the following criteria in mind:

1. What elements does the activity involve?
2. How much practice is required before the activity is accomplished?
3. What degree of skill is required for its execution?

The ranks of the activities according to difficulty in Tables I and II are transmuted into units of amount, as shown in Column III. This is accomplished by a statistical procedure, in which the formula below is used to obtain a percent position:

$$\text{Percent Position} = \frac{100 (R-.5)}{N}$$

R=Rank

N = Number of activities

¹Cotter al, B. O», *cit.*

TABLE I
TRANSMUTATION OF RANK OF INDIVIDUAL ACTIVITIES INTO
NUMERICAL SCORES

ACTIVITIES	I RANK	II PERCENT POSITION	III NUMERICAL SCORE	IV RECOM- MENDED SCORE*
Walking on Hands	1	.833	9.4	94
Snap Up	2	2.5	8.7	87
Handspring	3	4.17	8.3	83
Spplits	4	5.83	8.0	80
Handspring	5.5	8.33	7.7	77
Forearm Stand	5.5	8.33	7.7	77
Bck. Roll to Headstand	7	10.83	7.4	74
Handstand	8	12.50	7.3	73
Cartwheel-One Hand	9	14.17	7.1	71
For. Roll Over 4 Bodies	10	15.83	7.0	70
Handspring-Rolled JVla	11	17.50	6.8	68
Continuous Cartwheel	12	19.17	6.7	67
Finger Jump	13	20.83	6.6	66
For. Roll Over J; 3 Bodies	14	22.50	6.5	65
Headstand-Hands on Head	15	24.17	6.4	64
Cartwheel	16	25.83	6.3	63
Handspring Over Body	17	27.50	6.2	62
Toe Jump	18	29.17	6.1	61
For. Roll Over 2 Bodies	19	30.83	6.0	60
Headstand	20	32.50	5.9	59
Heel Jump	21	34.17	5.8	58
Folded Leg Walk	22	35.83	5.7	57
Bck. Roll-Hands Be- hind Head	23	37.50	5.6	56
Forward Roll Over Body	24	39.17	5.5	55
Continuous Bck. Roll	25	40.83	5.5	55
Curl	26	42.50	5.4	54
Forward Roll Without Hands	27	44.17	5.3	53
Jump The Stick	28	45.83	5.2	52
Single Squat	29	47.50	5.1	51
Cricket Walk	30	49.17	5.0	50

* The numerical score is multiplied by ten to eliminate the necessity of using decimals in computing scores for events.

TABLE II-Continued

TRANSMUTATION OF RANK OF GROUP ACTIVITIES INTO
NUMERICAL SCORES

=	ACTIVITIES	I	II	III	IV
		RANK	PERCENT POSITION	NUMERICAL SCORE	RECOMMENDED SCORE
	Elephant Walk	~9	71.~5	3.9	39
	Tandem Walk	30	73.75	3.7	37
	Rocking Stunt	31	76.~5	3.6	36
	Churn The Butter	3~	78.75	3.4	34
	Eight-Legged Animal	33	81.~5	3.3	33
	Run The Scale	34	83.75	3.1	31
	Archway	35	86.~5	~.9	~9
	Skin The Snake	36	88.75	~.6	~6
	The Twister	37	91.~5	~.3	~3
	The Wheelbarrow	38	93.75	~.0	~0
	Greetings	39	96.~5	1.6	16
	The Spin	40	98.75	.8	8

The percent position, then, is transmuted into a numerical score for each activity, as is shown in Column III, of Tables I and II. The transmutation is done by using a table computed by C. L. Hull.¹ Each score is multiplied by ten to eliminate the necessity of using decimals when computing the score of events in stunt and tumbling meets. The recommended score for each activity is shown in Column IV of Tables I and II, pages 277-280.

The sixty individual and forty group stunt and tumbling activities in Tables I and II do not represent a complete or exhaustive list. Only the best known and most common activities are included.

If the optional events in a stunt and tumbling meet for college girls or high school girls include activities which are not found in the Tables, it is recommended that the rank of the activities according to difficulty, and their respective numerical

¹Hull, C. L. The Computation of Pearson's χ^2 from Ranked Data. Journal of Applied Psychology, Vol. VI, 1922, pp. 385-390.

scores established in the Tables be used as a basis for the relative comparison of the new activities, and, as a result of this comparison, a numerical score for each new activity be agreed upon by the judges of the tumbling meet. If there is a variance of opinion among the judges, it is recommended that the estimated scores of each be averaged.

Sometimes a continuous tumbling activity, such as Continuous Rolls, etc., is included in a meet. In this case, the best method of obtaining the degree of difficulty score for such is for the judges to compare the difficulty of the continuous activity, as a whole, with the difficulty of the activities included in Tables I and II, and, as a result of the comparison, to give an estimated ranking and numerical score. Three common continuous tumbling activities are ranked in Tables I and II. They are Continuous Forward Rolls, Continuous Backward Rolls, and Continuous Cartwheels. The distance between the activity performed once, and the continuous activity may serve as a guide in putting an estimated value on other continuous activities, although no definite mathematical distance is evidenced.

Events in stunt and tumbling meets often include "Combination" stunts, such as a Backward Roll into a Headstand. In judging the difficulty of such an event, it is recommended that the combination activity be analyzed first, and then an estimated rating or score for the combination activity as a whole be agreed upon by the judges.

METHOD OF JUDGING ORIGINAL EVENTS

Original events should be judged and scored on the basis of both quality of performance and degree of difficulty.

In order to establish a degree of difficulty score for the original events, the following procedure is suggested.

The contestants entering the original events should be required to submit a detailed description of the activity to the judges before the meet.

The judges should analyze the activity as to the factors required for its execution. The judges, then, should compare

the activity relatively as to difficulty with the activities ranked in these Tables, and, as a result of the comparison, choose a numerical score for the event. In case of variance of opinion, an average should be taken of the numerical scores suggested by the judges.

The judges should grade the quality of performance of the original event by using the quality of performance scale. See page 275.

METHOD OF JUDGING CHALLENGE EVENTS

If a challenge event is included in the program of a stunt and tumbling meet, opportunity is given each team to perform an activity and challenge their opponents to accomplish it.

Challenge events should be judged and scored on the basis of both quality of performance and degree of difficulty.

The contestants, challenging, should submit to the judges before the meet a detailed description of the challenge event, stating definitely the factors which mark the success of the activity. If the difficulty score is not established, the judges should analyze the activity and compare it relatively as to difficulty with the activities ranked in this study. From this comparison the judges should agree upon a numerical score for this event.

When the challenge event occurs, the challengers perform the activity and the judges rate the quality of performance by the scale. See page 275.

The challengers, then, describe the activity to the opponents and state the factors which mark the success of the activity.

The opponents should be given a maximum number of minutes to perform the event and choose a participant, who, upon the call of the judges, attempts the activity before them.

The judges, then, with the criteria submitted by the challengers, decide whether the activity was performed, and they judge the quality of performance by using the quality of performance scale. The score obtained for this is multiplied by the degree of difficulty score.

METHOD OF JUDGING PYRAMIDS

As an event in a tumbling meet, compulsory pyramids may be organized into two types:

1. The pyramid is selected and announced before the meet, in which case the teams have practiced and organized themselves for the event.
- ~. The pyramid is selected by those in charge of the meet. As the event occurs on the program, each team is given a picture of the pyramid, and a maximum number of minutes in which to prepare and organize for the event. Each team, in turn, is called upon to build the pyramid.

The pyramid should be graded upon the basis of quality of performance by using the quality of performance scale.

SCORING TYPES OF EVENTS IN STUNT AND TUMBLING MEETS

The suggested bases of scoring the following types of events are as follows:

1. Compulsory events-range of score for quality of performance 0-10 points.
- ~. Optional events-range of score for quality of performance 0-10 points, multiplied by the degree of difficulty score.
- S. Original events-range of score for quality of performance 0-10 points, multiplied by the degree of difficulty score, estimated by the judges.
4. Challenge events-range of score for quality of performance 0-10 points, multiplied by the degree of difficulty score.

PROCEDURE OF OFFICIALS. WHEN SCORING EVENTS

It is recommended that there should be three judges, one of whom, also, acts as referee, and one official scorer for the stunt and tumbling meet. Each judge should be supplied with the scale for judging quality of performance, and a set of cards on which are printed large numerals from 0-10. After an event has been performed, upon a signal of the referee, each judge simultaneously should display his score for quality of performance by holding up the card before all contestants. The judges should record their scores on score sheets provided. A suggested scoring form is shown on Chart **XIII**, page 285.

It is recommended that the judges be permitted to compute the scores in one half points.

The duties of the official scorer are as follows:

1. Record the scores of an event, that are displayed by the three judges, on a final score sheet.
2. Average the three scores to obtain an average score.
3. Multiply the average score by the degree of difficulty score for all events, except compulsory ones, to obtain a final score for the events. A suggested scoring form is shown on Chart XIV, page ~86.

In any type of a meet involving physical activity, the question of the number of trials which should be allowed the contestants is a pertinent one. For stunt and tumbling meets the number of trials recommended is shown in Table **III** below.

If more than one trial is permitted, it is recommended that the score of the best performance be accepted.

COMPUTING THE WINNER

The winner of the meet, whether an individual or a team, is the one who, at the end of the meet, has the highest total score.

TIE SCORES

In case the stunt and tumbling meet ends with a tie score for the contestants, it is recommended that the score shall remain a tie.

TABLE **III**
NUMBER OF TRIALS RECOMMENDED FOR CONTESTANTS

<i>Type of Activity</i>	<i>No. of Trials</i>
Rolling-Forward Rolls, etc. _____	1
Supporting the Body Inverted-such as Head-stands, Handstands, etc. _____	1
Balances-involving more than one person, such as Swan Balance, etc. _____	(if balance is lost on first trial)
Springs-such as Headspring, etc. _____	1
Original Stunts-as an event on the program	1
Challenge Events _____	1
Pyramids _____	1

CHART XIII

SUGGESTED SCORING FORM FOR JUDGES OF STUNT AND TUMBLING MEETS

EVENTS	TEAM		TEAM	
I. COMPULSORY	<i>Contestants</i>	<i>Score</i>	<i>Contestants</i>	<i>Score</i>
1. For. Roll				
~. Headstand				
3. Dbl. For. Rl.				
4. Swan Bal.				
5. Pyramid				
II. OPTIONAL				
1.				
~.				
3.				
4				
III. ORIGINAL				
1.				
~.				
3.				
4				
IV. CHALLENGE				
1.	/			
~.				
	Total Score		Total Score	

DATE

Judge's Signature

CHART XIV

SUGGESTED FINAL SCORE SHEET FOR OFFICIAL SCORER OF STUNT AND TUMBLING MEETS

EVENTS	TEAM						TEAM					
I. COMPULSORY	Judges' Score			n'o OF DIFF.	TOTAL	Judges' Score			n'o OF DIFF.	TOTAL		
	I	II	III			AV.	I	II			III	AV.
1. For. Roll	-	-	-	-	-	-	-	-	-	-		
	-	-	-	-	-	-	-	-	-	-		
	-	-	-	-	-	-	-	-	-	-		
	-	-	-	-	-	-	-	-	-	-		
2. Headstand	-	-	-	-	-	-	-	-	-	-		
	-	-	-	-	-	-	-	-	-	-		
	-	-	-	-	-	-	-	-	-	-		
	-	-	-	-	-	-	-	-	-	-		
3. Dbl. For. Rl.	-	-	-	-	-	-	-	-	-	-		
	-	-	-	-	-	-	-	-	-	-		
	-	-	-	-	-	-	-	-	-	-		
	-	-	-	-	-	-	-	-	-	-		
4. Swan Bal.	-	-	-	-	-	-	-	-	-	-		
	-	-	-	-	-	-	-	-	-	-		
	-	-	-	-	-	-	-	-	-	-		
	-	-	-	-	-	-	-	-	-	-		
5. Pyramid	-	-	-	-	-	-	-	-	-	-		
II. OPTIONAL												
1.	-	-	-	-	-	-	-	-	-	-		
2.	-	-	-	-	-	-	-	-	-	-		
3.	-	-	-	-	-	-	-	-	-	-		
4	-	-	-	-	-	-	-	-	-	-		
III. ORIGINAL												
1.	-	-	-	-	-	-	-	-	-	-		
2.	-	-	-	-	-	-	-	-	-	-		
3.	-	-	-	-	-	-	-	-	-	-		
4	-	-	-	-	-	-	-	-	-	-		
IV. CHALLENGE												
1.	-	-	-	-	-	-	-	-	-	-		
2.	-	-	-	-	-	-	-	-	-	-		
	Total	Score	---			Total	Score	---				
DATE	Official	Scorer's	Signature									

CHAPTER XIV

ORIGINAL PROJECTS

CREATIVE work in tumbling on the part of the students is both possible and desirable. This may take the form of origination of new stunts or variations of stunts; origination of combinations of stunt and tumbling activities already known; or the origination of the arrangement of stunt and tumbling activities to represent a theme or characterization. These phases of original work are discussed in this chapter.

A. ORIGATION OF STUNT AND TUMBLING ACTIVITIES

Opportunity should be given the students to originate activities, Experience will show that as they experiment with the manipulations of the body either individually or with a partner or group, very often they will discover a new stunt. Sometimes the product of the students' creative work will be known by the instructor as a stunt already in published form. This experience, however, is as valuable for the students as if the stunt were one originated for the first time, for it is the result of creative work. They should be informed that the stunt is known, but should be commended for discovering it for themselves.

B. ORIGATION OF COMBINATIONS

As students become better acquainted with stunts and tumbling and enlarge their repertoire of activities they often enjoy the experience of making interesting combinations. This phase of creative work is most worthwhile.

C. ORIGATION OF ACCUMULATIVE STUNTS

In this project the first member of a group goes to the mat and does part of, or a whole, stunt. This may consist merely of taking a certain position. The next member does what No. 1

did, then adds to the stunt; the third member repeats the action of No. 1 and No.2, and adds to it. This continues until all members have had a turn. As a result of this accumulative action, interesting stunts and combination of stunts may result. The last member of the group should complete the action.

An illustration of an accumulative stunt follows:

a: The Tip-Up.

b: *a*, and Headstand.

c: *a*, *b*, and descent from Headstand by Forward Roll.

d: *a*, *b*, *c*, and upon rising from Forward Roll, jump facing opposite direction.

e: *a*, *b*, *c*, *d*, and Fish Flop.

f: *a*, *b*, *c*, *d*, *e*, and Walrus Walk.

g: *a*, *b*, *c*, *d*, *e*, *f*, and Cat Walk.

D. ORIGATION OF STUNT AND TUMBLING GAMES

Game forms offer excellent material for creative work. Opportunity should be given for the origination of the game, and the presentation of the game by the originator to the group. Discussion of the game should follow the participation in which the students actively engage in evaluating the game and in giving suggestions for improvement or variations.

Definite criteria should be set up by students and instructor which are to serve as standards by which to originate the games and, in turn, to evaluate the worthwhileness of the games.

Illustrations of the nature of the criteria are:

1. Players should be asked to hold inverted positions for only a very short time.
- fl. In games requiring speed, balances should be eliminated.
3. Activities should be chosen for games which call for the normal use of joints of the body.
4. Most races calling for unusual positions of the body should be run for only a short distance.

For illustrations of original games, see Chapter XI, page 231.

E. INTERPRETATION OF RHYMES

Rhymes and jingles present feasible settings for original work. The origination of rhymes by the students is an interesting project in itself, which adds interest to the origination of activities for their interpretation.

The instructor or student may read the rhyme, after which a certain amount of time is given for the participation of the students in planning the interpretation. This may necessitate the origination of stunts, or the choice, modification, and arrangement of activities for characterization. The following rhymes are presented and, in some cases, suggestions for activities are included from the viewpoint of showing the possibility of creative work.

1. Jack Be Nimble

Jack be nimble, Jack be quick,
Jack jump over the candle stick.

The problem involved is to make the candle stick holder represent the candle, and suggest ways by which Jack can jump over the candle stick.

The candle stick may be made by two individuals doing the Snail ¹ stunt as follows:

Near one end of the mat Nos. 1 and 2 lie on the back across the mat opposite each other, heads toward each other, with distance between the heads of about three feet. They rest their arms on the mat at the sides of the body. They, then, raise the legs over the head until the feet rest on the mat beyond the head.

One person, as the candle, may sit in the space between the other two, facing the far end of the mat. The position may be tailor fashion with arms crossed and ankles crossed.

Jack leaps over the candle. Suggested stunts for Jack to do are:

1. Jump over the candle and do a Forward Roll.
2. Jump over, landing with a half turn, and do a Backward Roll.

¹ Co~teral, B. and D. *Op. cit.*, p. 46.

3. Straddle jump over, spring and turn about, and return by a straddle jump over the candle.

2. Humpty Dumpty

Humpty Dumpty sat on a wall,
 Humpty Dumpty had a great fall.
 All the King's horses and all the King's men
 Couldn't put Humpty Dumpty together again.

The problem involved is to construct the wall, to suggest ways in which Humpty Dumpty could "fall," and to dramatize the attempt of the King's horses and men to put Humpty Dumpty together again.

3. Jack and Jill

Jack and Jill went up the hill
 To fetch a pail of water.
 Jack fell down and broke his crown,
 And Jill came tumbling after.

The problem involved is to dramatize the progress of Jack and Jill, and represent the tumble of each.

4. Leg Over Leg

Leg over leg,
 As the dog went to Dover,
 When he came to a stile,
 Jump he went over.

The problem involved is to originate the interpretation of the "leg over leg" method which the dog used; to originate the stile; and show methods of jumping the stile.

Groups of students may be formed, each of which presents the interpretation of the rhyme.

5. Here We Go Up

Here we go up, up, up,
 And here we go down, down, downy,
 And here we go backward and forward,
 And here we go round, round, roundy.

This jingle offers opportunity for the arrangement of stunts in progressive sequence. It lends itself well to group work. For instance, with a circle of individuals facing inward the following sequence may be used:

First line: Headstand by each individual.

Second line: A slow descent from the Headstands. See page 187.

Third line: A Backward Roll, followed by a Forward Roll.

Fourth line: The Merry-Go-Round. See page 217.

6. *Ride a Cock Horse*

Ride a cockhorseto Shrewsbury Cross

To buy little Johnny a galloping horse.

It trots behind and it ambles before,

And Johnny shall ride till he can ride no more:

The problem involved is to represent the horse's method of progressing. To "trot behind and amble before" is quite a feat in itself. Amble is defined as "an easy gait of a horse in which the legs on either side are lifted together." ¹ Trot is defined as "a gait of a quadruped in which the legs move in pairs, diagonally but not quite simultaneously." ²

7. *A Twister*

When a "twistera twisting will twist him a twist

For the twisting of his twist he three times doth intwist.

Suggestion:

First line: Twisting a piece of paper, place it at the side of the right foot.

Second line: Corkscrew ³ stunt.

8. *Robert Rowley*

Robert Rowley rolled a round roll round,

A round roll Robert Rowley rolled round;

Where rolled the round roll

Robert Rowley rolled round?

Suggestion: The Roly-Poly stunt.'

¹ Webster's Collegiate Dictionary. *Op. cit.*, p. 33.

² *tua*, p. 1030.

³ Pearl, N. H., and Brown, H. E. *Op. cit.*, p. 99.

⁴ Cotteral, B. and D. *Op. cit.*) p. 43.

F. CHARACTERIZATION OF ANIMALS AND OBJECTS

Characterization of animals and objects through stunt and tumbling activities is an interesting possibility for original work on the part of the students. Below is an illustration of the carrying out of a theme which involves creative work in characterization.

The Christmas Tree and Toys

The project consists of two parts: first, the origination of the "toys"; second, the making of the tree, after which the toys group around the tree.

Time should be given the students in which to participate in the origination or planning of the "toys." This may consist of originating new stunts or of using known stunts and adapting them to the toy idea.

Below is a list of "toys" which have been planned by students:

1. The Rocking Horse.

Four individuals make the Rocking Horse by doing the Rocking stunt¹ and a smaller individual sits in the rocking horse by sitting in the lap of one of the individuals, placing the legs over the knees of both individuals and letting the feet hang down toward the opposite individual's lap. The Rocking Horse then rocks back and forth.

2. The Bouncing Ball. See page 205.*3. The Jack in the Box.*

A group of individuals form a box out of which one individual jumps when the lid is opened.

*4. The Roly-Poly.*²*5. Ten Pins.*

A long row of mats is placed on the floor, at the end of which a group of individuals is placed representing the ten pins. They sit in the position of the Roly-Poly stunt. One individual, as the player, stands at the other end of the mat and starts the ball rolling down the mat. The ball is represented by

¹Cotter al, B. and D. *Op. cit.*, p. 55.

²*Ibid.*, p. 43.

an individual doing a Continuous Forward Roll down the mat. As the ball touches the Ten Pins some of them roll around at various angles. Some remain in their places after toppling back and forth. As soon as the ball strikes the Ten Pins it rebounds back a little way. This is accomplished by a few Continuous Backward Rolls, the last one done slowly until the ball comes to a stop.

6. *The Aeroplane.*

Two individuals form the Swan Balance. See page 191. The top mount represents the aeroplane. After balancing it takes a "nose dive." This is accomplished by going from the Swan Balance into the Headstand.

7. *The Christmas Tree.*

The tree may be made by a tall individual, standing with a small one in a sitting mount on the shoulders. The top mount may raise the arms over the head and use the hands as the ornament.

Around on all sides of the couple, individuals stand side by side, facing outward. Their arms, resembling branches, may be raised upward and backward until they touch the center couple.

Around the group, a circle of individuals may kneel with arms, representing the low branches, raised at various angles.

Teaching Suggestions: It is not possible to keep the tree in formation any great length of time. After it is formed the "toys" may be grouped around it. Then it is best to disband it when the toys are put into action.

An interesting procedure in presenting the "toys" is to have one "toy" at a time characterized, after the performance of which the students guess what the "toy" is.

G. STUNT AND TUMBLING STORIES

In this project the students originate a story in which are involved situations calling for stunts or tumbling activities. After the story is composed one individual narrates it, and, as this is done, the other students characterize the action by performing the stunts mentioned.

•

A variation of the story project is to have one student start the story after which each student, in turn, takes up the thread of the story, adds to it, and passes it on to another student. This extemporaneous origination often leads the students into unexpected and interesting activities.

This project is feasible after the students have gained a repertoire of tumbling activities. It offers an opportunity to select and adapt activities previously learned to characters and situations.

Below is a sample story. Following it are suggested themes for other stories and a few possible activities for each theme.

The Predicaments of Peter

Once upon a time in a little village there lived Peter. He always was getting himself into predicaments, and what a time he had in getting himself out of them!

One April, day he was lying on a hill-top day-dreaming. He lay face downward looking at the village below, and lazily swung his crossed feet upward. Suddenly, he realized the sun had gone under a cloud, and he suspicioned that he felt a drop of rain. As he raised his head up to make sure, he happened to catch hold of his crossed feet with his hands.

"Dear me," thought Peter, "It is going to rain. I must go home. But what a funny position I am in. I seem to be all in a Tangle."

So he worked and worked, and, finally, succeeded in rolling over, and sitting up. But, then, he found his feet were crossed, and he had a most difficult time in uncrossing them and getting to a standing position.

He started running down the hill, but all at once he stumbled and stubbed the big toe of his left foot. He raised the foot and was rubbing the toe with his right hand when suddenly a bolt of lightning came, and it frightened him so he jumped, and much to his surprise, Jumped Over His Foot. As he did so his knife dropped out of his pocket on the ground in front of him.

Peter was standing on one foot holding the other one in back of him, just as he ended the jump. He looked at the knife

and said, "O-ho, I'm in a strange position to pick up anything, but perhaps I can take a Knee-dip ¹ and get it. And sure enough he did.

Off he started again, but limped along with his injured toe. Suddenly he thought, "I should have a cane."

So he looked around and spied a branch of a tree hanging above his head and decided that it would be an excellent cane. He reached up with both hands and pulled, but could not sever the branch. So next he crossed his arms, grasped the branch with his palms toward himself, and gave a strong pull. To his joy the branch broke away from the tree, but to his dismay he found his head between his arms and the branch behind his neck.

"Dear me," sighed Peter, "it looks as if I am going to have to get myself into a Human Knot ² to come out of this predicament."

So he wiggled and maneuvered and, finally, succeeded in sliding the branch down his back, and in getting his feet on the other side of it.

Away he limped with his cane, but suddenly he thought he heard a strange noise. He poised with his cane held by both hands in front of him, and all at once the peculiar noise sounded so close behind him that he fairly Jumped Over His Stick,³ and just as he landed it sounded again, this time right in front of him, so he gave a Jump Backward Over His Stick.

He was so frightened he dropped his cane, and started running, but all at once he lost his balance, and found himself doubled up, Rolling and Rolling.

Suddenly he stopped, and much to his surprise, found himself at the foot of the hill near his village home. He took out his handkerchief, mopped his brow, and slowly rose. In so doing the handkerchief dropped and landed at the side of his right foot. Peter started to pick it up with the left hand by passing it in front of the body, around the outside of the right leg and forward between the legs.

¹ Pearl, N. H., and Brown, H. E. *Op. cit.*, p. 96.

² *Ibid.*, p. 105.

³ *Ibid.*, p. 106.

Peter scratched his head and thought, "I feel as if I am getting myself into a Corkscrew ¹ to get this handkerchief."

With twisting and reaching, he finally succeeded in picking up the handkerchief, and down the familiar street he went. By his Swagger Walk you never would have known what predicaments he had encountered on that April day.

SUGGESTED THEMES FOR STUNT AND TUMBLING STORIES

Themes

Suggested Activities

A Hunting We Would Go

Fish Hawk Dive ²

Rabbit Jump

Frog Hop

Pigeon Walk (Dwarf Walk ³)

Duck Walk

Skin the Snake ⁴

A Visit to the Circus

Elephant Walk ⁵

Camel Walk ⁶

Thousand Legged Animal
Walk

"Git Up Napoleon"

Tumbling Feats

Merry-Go-Round

The Adventures of the Twins

Partner Rolls

Run the Scale ⁷

Double Forward Rolls

Couple and other Stunts

A Journey to Tumbleland

The Walking Chair

Types of Walks

With visits to:

The Land of Bolls

Rolls

The Land of Pyramids

Pyramids

The Land of Statues

Groupings

The Topsy Turvy Land

Headstands

Handstands

Cartwheels

Flips

¹ Pearl, N. H., and Brown, H. E. *Op. cit.*, P: 99.

² *tua*; p. 96.

³ Cotteral, B. and D. *Op. cit.*, p. 42.

⁴ *tua*., p. 67.

⁵ *iis*; p. 47.

⁶ *Ibid.*, p. 47.

⁷ *Ibid.*, p. 54.

CHAPTER XV

STUNT AND TUMBLING DEMONSTRATIONS

DURING the year's work in tumbling, it may be desired to produce a tumbling demonstration. The demonstration is a worthwhile project if it is an outgrowth of the activities of the tumbling group. It offers opportunities for group action and, also, often acts as an incentive, stimulating increased interest and desire for improvement in skill.

The tumbling demonstration will be of greater educational value to the students if they have an active part in the development of it. The degree of student participation in the planning depends, of course, upon their ability. As plans for the proposed demonstration are begun, the first consideration necessarily deals with the choice of the type of the demonstration. The selection of appropriate activities for the demonstration follows this decision. The third important consideration is the selection of individuals to perform the activities. The second and third considerations naturally are dependent upon each other, for the performer is essential for the success of the activity. These three steps are discussed in turn.

I. Selection of the Type of Demonstration.

The tumbling group may desire to present their achievements in no other form than that of a demonstration of the various tumbling activities and skills. When this type of demonstration is desired, the main requirement is to organize the program in such a way that a pleasing presentation of the tumbling activities occurs and proper participation results.

If a dramatic element in the demonstration is desired, it is necessary to select a theme which will permit the carrying on of the tumbling activities. Following are suggestions for themes for tumbling demonstrations.

1. Rollicking Raggety Anns.
- ~. The Story Book Tumblers.
3. The Romping Rompers.
4. In Tumble Land.
5. The King's Jesters.
6. The Children Of The Old Woman Who Lived In A Shoe.
7. In The Land of Cotton.
8. International Tumblers.
9. Tumbling Through The Ages.

II. Selection of Activities.

A representation of the various types of activities in the tumbling program is desirable in the demonstration, such as rolling, balancing, supporting the body weight inverted. Also, there is a place for individual, couple, and group stunts. The selection of the events depends upon the ability of the members of the tumbling group. It is essential to adjust the stunts to the characterizations in the development of the theme. Many of the stunts will fit into the action of the characters as the theme is carried out. The selection of the activities in the demonstration will be affected by the environment in which the demonstration is given. If the performance is done on the gymnasium floor on a level below the spectators, activities which put the body on the floor, such as Opening of the Rose,¹ may be included, but, if the demonstration is done on a stage, this type of performance is ineffective, due to the inability of the spectator to see.

III. Selection of Individuals to Perform the Activity.

In selecting individuals for the different activities in the demonstration, there are several considerations which should be kept in mind:

1. Effort should be made to have as wide participation of students as possible.
- ~. The number of activities performed by anyone individual should be limited.
3. The individual should be able to perform the activity well.

¹Cotter al, B. and D. *Op, cit.*, P- 69.

In an educational institution there is no place for the development of the individual at the expense of the group. After normal participation of all the members of the group has been provided for in a tumbling demonstration, outstanding individual work can be recognized as a contribution of one member of the group to the project of the group.

It is essential that the endurance of the individual is not taxed by too frequent participation in the various numbers of the demonstration. Again, in order to do justice to the skill that is to be performed, the individual should be in the proper physical condition. If the student is rushed from one activity into another, the results may not be satisfactory.

A device which will prove helpful to the instructor is a master chart showing the participation of each individual in the activities, arranged in the order as they come in the demonstration. See Chart XV, page 300. When a device of this sort is used, the instructor definitely can see the place of each individual in the demonstration. The number of events participated in and the occurrence of each individual's participation in the program can be checked, and adjustments made if necessary. The chart serves, also, to save time and confusion in the practices, for it can be used as reference to call the individuals for their parts in the various numbers. The drawing of the pyramids and groupings at the side of the chart and the identification of the individuals taking part in each, through the placing of initials over the figures, is of great help in speeding up the practices of the group activities and checking the participation of the students.

CHART XV

DEMONSTRATION MASTER CHART

<i>Names</i>	<i>Double Rolls</i>	<i>Rocking Stunt</i>	<i>Fan Pyramid</i>	<i>Churn Butter</i>	<i>Partner Roll</i>	<i>Headstands</i>	<i>Dive Over Bodies</i>	<i>Curve Pyramid</i>	<i>Handstands</i>	<i>Balances</i>	<i>Tumble Down Pyramid</i>	<i>Flips</i>	<i>Hand Springs</i>	<i>Triple Rolls</i>	<i>Finale</i>
<i>Thelma Cleveland</i>	✓	✓		✓	✓	✓		✓	✓	✓	✓	✓			✓
<i>Martha Galbraith</i>	✓	✓		✓	✓	✓		✓			✓				✓
<i>Eva Hatcher</i>	✓	✓		✓	✓	✓	✓		✓		✓			✓	✓
<i>Rita Pilkey</i>	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
<i>Grace Potts</i>	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓			✓
<i>Edith Roberts</i>	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓				✓
<i>Flo Robison</i>	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
<i>Pattie Thompson</i>	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓		✓
<i>Angie Blain</i>	✓	✓	✓	✓	✓	✓	✓	✓			✓				✓
<i>Elvira Davidson</i>	✓	✓	✓	✓	✓	✓		✓			✓				✓
<i>Martha Miller</i>	✓	✓		✓	✓	✓				✓	✓				✓
<i>Alice Vaiden</i>	✓	✓	✓	✓	✓	✓		✓			✓				✓
<i>Bonnie Wilkinson</i>	✓	✓		✓	✓	✓	✓	✓		✓	✓				✓
<i>Myrtle Stucker</i>	✓	✓	✓	✓	✓			✓			✓				✓
<i>Martha Tagle</i>	✓	✓		✓	✓	✓		✓			✓				✓
<i>Mable Wade</i>					✓			✓		✓	✓				✓

A successful demonstration depends upon good performance. No matter what possibilities a specific activity has, if it is not done well, its effect is lost. It is essential that only

those activities which can be done with assurance be included in the program. A simple program done well is better than an intricate and difficult one half done.

COSTUMES

The selection of appropriate costumes for the demonstration is important. If the participants are not taking the part of characters, the usual costumes worn by the tumbling group can be used, provided they are decreed presentable for public appearance.

When a theme is carried out in the demonstration, the selection of appropriate costumes for the characters is necessary. This sometimes is a problem, especially for girls. A romper suit often can be used satisfactorily. The use of skirts in costumes for girls is questionable. If they are used, it is desirable to have bloomers of the same material as the skirt attached to the skirt. It, also, is desirable to have the skirts short as, otherwise, they will interfere with the movements of the body. If clown suits are used, care must be taken not to have them too baggy in order to prevent catching the foot in the excess material. One piece costumes are more satisfactory than two because of the tendency of the latter to pull apart.

Whatever costume is used should permit freedom of action. A dress rehearsal before the program is given is essential in order that the costumes can be tested. This, especially, is necessary if the costumes are larger or tighter than those the students are accustomed to use.

TUMBLING DEMONSTRATIONS

1. Rollicking Raggety Anns

Scene: A room at one side of which is sitting an old woman sewing on a rag doll. All around the room are Raggety Ann dolls.

Characters: The old woman. Raggety Ann dolls, as many as desired.

Costumes: The old woman is dressed in a typical fashion. She is wearing spectacles and has her sewing paraphernalia with her. At her side is a cane. The Raggedy Anns are dressed in romper suits of different colors, socks, and gymnasium shoes. The head, face, and neck are covered with a bag-like affair upon which is made a face representing that of a rag doll. Vivid colored yarn for hair crowns the head.

Directions for making the face: Cut off the top of a gauze vest. Gather up the edges until the vest is closed at the top. Slide over the head. Cut holes for the eyes and outline the holes with black yarn. Avoid cutting these holes too large. Draw a triangle for the nose and trace the lips for the mouth. Outline both of these with red yarn. Put rouge on the cheeks. Take a ball of yarn of the desired color for the hair and measure it from one side of the head to the other to determine the length desired for the hair. Rewind the ball of yarn according to this measure, and cut the ends. Take the strands thus obtained and sew the center point of them to the middle line of the head covering. It may be desired to put a second row under the first to make more hair at the side of the head. Place a draw string in the vest at the neck line, and tie on the inside. Insert the end of the vest in the costume.

PROGRAM

I. Exit of the Old Woman:

The old woman sews the last stitches on the doll. Then she puts down her materials, picks up her cane and leaves the room. She makes very definite taps with her cane as she leaves.

II. Coming to Life of the Dolls:

As the tapping of the cane becomes silent, the Raggedy Anns gradually come to life, arise, and dance around in their joy. The desired movements may be set to music. At the finish of the dance one Raggedy Ann suddenly has an idea. The others huddle around her and enthusiastically receive it. They then take their positions for the Continuous Forward men.

III. Continuous Forward Roll:

First doll does the Continuous Forward Roll down the length of the mats. Each follows in turn.

IV. Rocking: 1

Couples scatter around the stage and do the Rocking Stunt.

V. Headstands: Eight individuals in the formation of two semi-circles on the stage stand on their heads. In front of each semi-circle, an individual does a Headstand and moves the legs sideward and back and forth.

VI. Team Progressive Rolls. See page 172.

VII. Pyramid.

VIII. Forward Roll Through Rope. See page 228.

1. A jumping rope is turned, and the individual runs forward and does a Forward Roll through the rope. Repeat with couples.
2. The individual does a Cartwheel as an entrance in the rope, remains in jumping, and leaves the rope by a Cartwheel.

IX. Animal Walks:

Camel Walk, Elephant Walk, Cricket Walk, Flying Swan, Cat Walk, and others.

X. Double Roll Through the Archway:

Four couples make the Archway with a space between each. Two individuals start a Double Forward Roll at the end of the mat, enter the Archway, go through it, and come back with the Double Backward Roll. When in the middle of the Archway, they go forward two Rolls and then backward for the rest of the way out.

XI. Pyramid.

XII. Feature Stunts:

1. Shuttle Roll.
2. Combination: Handstands on Knees to Headstand Behind Head.
3. Other stunts by skilled individuals.

¹Cotteral, B. and D. *Op. cit.*, p. 5~

XIII. Diving:

1. Dive Over Supported Bodies. See page 180.
2. Individuals dive through a large, medium, and small hoop, and finally through all three at once. See page 178.

XIV. Pyramid.

XV. Ending:

While in the pyramid, the tap, tap, tap, of the old woman's cane is heard approaching. The individuals dismount from the pyramid, run to their places around the room and begin to flop. The old woman enters, hunts around for one Raggety Ann, finds her, looks her over carefully, displays bewilderment at what she sees, sits down, and sews again.

2. Story Book Tumblers

Characters: Mother and two children, Little Miss Muffet, The Spider, Jack and Jill, Jack Be Nimble, and three individuals to make the candle stick, Mary Quite Contrary, Simple Simon, Smarty Smarty, Tom The Piper's Son, The Pig, Humpty Dumpty, Little Boy Blue, Ten O'Clock Scholar.

Costumes: Each character wears an appropriate costume for the characterization and tumbling stunts. Ideas may be gained from illustrations of Mother Goosebooks. Humpty Dumpty has a costume of eggshell color that is made to take an egg-like shape by the use of two or three wire hoops.

Scenes: Prologue: A room in a Nursery.

Main Program: The same room, but with a large story book at the right front. The book is constructed of two wooden or beaver board frameworks to make the front and the back. These are hinged so that the front can be swung back to open the book. The framework is covered with paper with Mother Goose and appropriate designs painted or pasted on the front to represent the cover of the book. The back, which represents the page of the book, has an opening cut out large enough for a character to stand in.

PROLOGUE

The mother sits in an armchair, holding the two children. All three are looking at a Mother Goose book. During this time the song, "The Story Book Ball,"¹ is sung by someone off-stage, or at the side of it. By the close of the song the children have fallen asleep over their book*. Lights go out.

PROGRAM

1. Entrance of Characters:

The characters are grouped behind the book in such a way that they may take their places in the opening of the book according to the order of entrance given below. The two children of the prologue run over and open the story book. The character enters the room as described. After each entrance the book is closed, the next character gets into place, then the book is opened.

1. Little 'Miss Muffet: Sits eating her pudding. The Spider (individual doing the Spider Walk, page 199), rounds the corner of the book and frightens her. She runs to the other side of the stage. The Spider "feels" around the book, and when Miss Muffet stops running, it wanders off-stage.

2. Jack and Jill: Jack and Jill stand side by side. Jack leads out with the pail and motions for Jill to follow. *dust* as she starts, he stumbles on the mat, and Jill comes tumbling after. They gather up their pail and proceed with it between them to the other side of the stage.

3. Jack Be Nimble : Jumps out of the book and cartwheels or handsprings around. In the meantime, three individuals come out and form the candle stick.. See page 289. Jack Be Nimble jumps over the candle stick, then runs around and dives over it and does a Forward Roll.

4. Mary Quite Contrary: Stands, sprinkler in hand, looking at the group. They motion for her to come and play, and she vigorously shakes her head, ."N o l". This is followed by

¹Montgomery, B. and Perry, G. The Story Book Ball. 30 W. Lake Street, Chicago, Illinois, Will Rossiter.

coaxing and the result is the same. The group then pantomime for her to "stay there" and turn their backs on her. She then steps out and joins the group.

5. Simple Simon: Sits with a balloon in one hand, and a fishing rod in the other, fishing in a small pail. The children laugh at him and he gets up with a silly grin, walks across the 'stage, stubs his toe, places his pail down and fishes again. Someone runs over to him and whispers to him. He suddenly becomes conscious of the audience for the first time.

6. Smarty Smarty : Walks out of the book with a confident and self-pleased air, does a stunt such as the Cartwheel, gets up and bows and bows to the audience.

7. Tom The Piper's Son: With The Pig (a small person) , across his back in the saddle back carry, he runs across the stage and joins the group.

8. Humpty Dumpty: In a jovial mood enters the stage, sits down cross-legged, and does the Roly-Poly Stunt. Struts across the 'stage to the group.

9. Little Boy Blue: Is stretched out sound asleep. Someone from the group runs over and shakes him awake. He joins the party sleepily.

II. Tumbling Program:

1. Tumbling Reel. See page 248.

? Arrival of the Ten O'Clock Scholar: As the Tumbling Reel is finished, a knock is heard on the book. The boy and girl open the book and out steps the Ten O'Clock Scholar with books in one hand and a half eaten apple in the other. The tardy member is welcomed in the group.

3. Double Rolls: Double Forward Rolls, Backward Rolls, and a combination of the two are performed.

4. Rock-a-Bye Baby: The characters group themselves by twos around the stage and do the Rocking Stunt.

5. Merry-Go-Round.

6. Pyramid.

7. Headstand Formation: Eight members form a circle. They skip around the circle, take a Forward Roll into the center

of it, get into position, and do Opening of the Rosel twice. They then do a Backward Roll away from the center of circle and go into a Headstand.

8. Group Dive. See page 180. Other dives as desired.

9. Balances.

10. Humpty Dumpty's Fall: As the dives are taking place, four individuals near the back of the stage stand side by side, turn their backs to the audience, and bend forward from their hips bracing their hands against their legs. They, thus, form the wall for Humpty Dumpty who sits upon the hips of the middle two. After the last dive Humpty Dumpty begins to laugh, and rocks back and forth until he finally topples over forward, doing a Forward Roll on the mat, at the completion of which he lies sprawled out. The other characters rush to him, and one runs to the wings and motions for some one to come. A group of King's horsemen enter, riding Hobby Horses. They dismount, and attempt to put "Humpty Dumpty together again," but to no avail. So they pick him up, and carry him" off stage.

11. Pyramid.

12. Individual Stunts.

13. Finale: The children suddenly" find Little Boy Blue sound asleep. Others become drowsy as the second verse of the Story Book Ball is sung off stage. Curtain.

3. The Romping Rompers

For complete description see, "The Romping Rompers," Journal of Health and Physical Education, May, 1930.

4. In Tumble Land

Scene: At the back of the stage a hillside is represented with a road crossing it at three different levels. This is accomplished by the use of three elevations of graduated heights, set one in front of the other.

Characters: Individuals from Tumble Land.

¹Cotteral, B. and D. *Op. cit.*, P: 69.

PROLOGUE: ON THE HIGHWAY TO TUMBLE LAND

As the curtain opens, the characters are seen approaching Tumble Land by the three roads. They cross the upper and lower levels from right to left and the middle level from left to right. The characters progress across the stage by various locomotive stunts such as the Animal Walks, Bouncing Ball, Git Up Napoleon, Scooter, etc. Curtain.

PROGRAM

As the curtain opens the characters may be formed in a grouping around the stage, or they may be in full activity using stunts with a definite rhythm. For instance, at the back of the stage three or four individuals may be spaced who do the Top ¹ at regular intervals; at the front of the stage a Scooter may be traveling; other couples, grouped around the stage, may be doing the Rocking Stunt, Wring the Dish Rag," The Spin," etc.; and other individuals may be doing the Roly-Poly Stunt.² The timing of the execution of the various stunts may be made into a rhythmic pattern.

From this point, a program is carried on.

5. *The King's Jesters*

Scene: A room with the King's chair elevated.

Characters: The King and his attendants, the three Jesters, other Jesters.

PROGRAM

The King is seated in his chair with his attendants grouped around. He calls for his Jesters three to entertain him. They ask for permission to bring in other Jesters. Their request is granted and they usher in the Jesters with tinkling bells and go through a tumbling demonstration.

A variation of this demonstration may be called, "Old King Cole and His Entertainers." This offers the possibility of bringing in the Fiddlers, etc.

¹ Pearl, N. H., and Brown, H. E. *Op. cit.*, p. 95.

² Cotteral, B. and D. *Op. cit.*, P- 56.

³ *tua*; p. 55.

⁴ *tua*; p. 43.

6. *Children of the Old Woman Who Lived in the Shoe*

Scene: A large shoe cut out of wood or beaverboard at the back of the stage. See nursery rhyme books for ideas in designing the shoe. Windows and doors are cut in the shoe.

Characters: Old Woman and Children.

PROLOGUE

There was an old woman who lived in a shoe.
She had so many children she didn't know what to do.
She gave them some broth without any bread,
She whipped them all soundly and put them to bed.

This verse can be read.

PROGRAM

As the curtain opens, the old woman comes out of the door of the shoe and many children's voices are heard calling good-bye to her. She shuts the door tightly, acts confident that all the children are in the house, and leaves with an empty basket on her arm, as if going on an errand.

As soon as she is out of sight, the children come scampering out of the windows and doors. In a hilarious mood they romp extemporaneously, then the leader gets them organized and they go through the demonstration.

The old woman comes home, the children scamper into the shoe and she spansks a few. One little youngster hides behind the tip of the shoe until the old woman has entered the shoe. When the door is shut she comes out, rolls, cartwheels, etc., salutes the audience, and tip toes into the shoe.

7. *In the Land of Cotton*

Scene: An outdoor scene with cotton bales piled at the back.

The scene could represent a levee or dock.

Characters: A group of pickaninnies.

PROGRAM

The pickaninnies may be hidden behind the bales of cotton and after the curtain opens, they peep over the edges, run forward, and engage in a tumbling program. Some comical stunts are in keeping with this type of program.

8. *International Tumblers*

Scene: A clear stage with flagstaff holders at various points.

Characters: Boys only, or girls only, or a mixed group. A certain number of characters represent in costume and activities the countries selected, such as Japan, Holland, Germany, Spain, and the United States of America.

PROGRAM

1. *Entrance:* Representatives from each nation march in behind a member carrying a flag. As the flag is deposited in the holder, the representatives group themselves at specific points on the stage.

2. *Events:* The program may be conducted by having each nation complete its total number of activities in turn, or by having the nations alternate by performing one activity at a time in rotation.

Activities should be selected which are characteristic of each nation. Suggested types of activities follow:

Japan: Fan Pyramid;¹ stunts with colored balls (see pages 222-225); dives through hoops covered with colored paper; balance stunts. (See Chapter IX.)

Holland: Revolving activities, such as Double Rolls, Merry-Go-Round, etc.

Germany: Group work; displaying precision, such as marching in a group to the mat; Team Forward Rolls; pyramids.

Spain: Emphasis on individual activities, such as Cartwheel Through the Rope, Heel Knock "Twice," Jump the

¹ Cotteral, B. and D. *Op. cit.*, p. 88.

² Pearl, N. H., and Brown, H. E. *Op. cit.*, p. 98.

Stick.' (Substitute a scarf for the stick.) Also, Merry-Go-Round, No. 3 or 4.

United States: Activities involving speed, such as Continuous Rolls, Double Rolls, etc., performed at fast speed; activities giving impression of record breaking, such as Dives Over Bodies for distance; Dives for height; individual, couple, and group activities, involving skill.

3. *Finale:* A pyramid or groupings of pyramids are formed in the center of the stage including everyone, with the representatives of the nations intermingled. The representative at the highest center peak is an American, who unrolls an American flag and waves it. Curtain.

Suggestion: This type of demonstration may be organized to represent the Olympics, in which the nations assemble to compete for honors. A contest thus is staged, including some events in which all nations engage, and some which call for voluntary feats. At the end, scores are computed and the winner is announced. This may be the United States whose representative may invite the other nations to participate in a final group activity, such as a pyramid, as described above.

9. *Tumbling Through the Ages*

The demonstration consists of scenes, showing tumbling at various historical periods throughout the ages. See Chapter I for a historical sketch. Suggestions for possible scenes are:

Egyptian: A religious ceremony. Girls perform tumbling activities as part of the ceremony."

Roman: A banquet at a wealthy Roman home. Tumblers as entertainers at the banquet.

Middle Ages: A mediaeval Fair scene. Tumblers display their spectacular feats.

England: Tumblers entertaining royalty.

America: Circus scene with clowns as tumblers, or a group of tumblers illustrating modern tumbling in educational institutions.

¹ Pearl, N. H., and Brown, H. E. *Op. cit.*, p. 106.

² The following gives helpful descriptions: Davies, N. de Garis. *Egyptian Expeditions, 1925-27.* New York, The Metropolitan Art Museum. Price, fifty cents.

BIBLIOGRAPHY

I. HISTORICAL

A. Books

- Brand, John. Popular Antiquities of Great Britain. In three volumes. London, George Bell and Sons, 1882.
- Brown, Tom. Amusements, Serious and Comical, and Other Works. Original publication, 1700. Edited by Arthur Hayward. London, George Routledge and Sons, Ltd., 1927.
- Burton, Robert. The Anatomy of Melancholy. Original publication, 1621. New Impression, London, Chatto and Windus, MCMXXIV.
- Chambers, E. K. The Elizabethan Stage. Vol. II. Oxford, at the Clarendon Press, MCMXXIII.
- Chambers, E. K. The Mediaeval Stage. Vols. I and II. Oxford, Clarendon Press, MCMIII.
- Davis, W. S. Life on a Mediaeval Barony. New York, Harper and Brothers, 1923.
- Depping, Guillaume. Wonders of Bodily Strength and Skill in All Ages and All Countries. Translated and enlarged from the French by Charles Russell. New York, Scribner, Armstrong and Co., 1873. Present publishers, Charles Scribner's Sons, New York.
- Ducharte, Pierre Louis. The Italian Comedy. Translated by Randolph T. Weaver. New York, The John Day Co., 1929.
- Duruy, Victor and others. General History of the World. New York, Thomas Y. Crowell Co., 1925.
- Emmanuel, Maurice. The Antique Greek Dance. London, John Lane Co., 1916. Dodd, Mead and Co., New York, American publishers.
- Greenwood, Isaac J. The Circus-Its Origin and Growth Prior to 1853. New York, William Abbatt, 1909.
- Hartley, Marsden. Adventures in the Arts. New York, Bani and Liveright, 1921.

- Harzberg, Hiler and Moss. Slapstick and Dumbbell. Paris, The Lecram Press, 19~4.
- Homer. The Iliad. Translated by Alexander Pope. New York, Thomas Y. Crowelland Co.
- Homer. The Odyssey. Done in English Verse by William Morris. . London, Longmans, Green and Co., 1896.
- Jusserand, Jean Adrian. English Wayfaring Life in the Middle Ages. Translated from the French by Lucy Toulmin Smith. First Edition, 1889. London, Ernest Benn, Limited, 19~5.
- Lacroix, Paul. Manners, Customs, and Dress During the Middle Ages, and During the Renaissance Period. London, Chapman and Hall, 1874.
- Le Roux, Huques, and Garnier, Jules. Acrobats and Mountebanks. Translated from the French by A. P. Morton. London, Chapman and Hall, Limited, 1890.
- Matthews, Brander. A Book About the Theater. New York, Charles Scribner's Sons, 1916.
- May, Earl Chapin. The Circus from Rome to Ringling. New York, Duffieldand Green, 193~. Present publishers, Dodd, Mead and Co., New York.
- Newberry, Percy E. Beni Hasan. Part II. London, Egypt Exploration Society, 1893.
- New English Dictionary on Historical Principles. Edited by Sir James Murray and others. Vol. X. Oxford, at the Clarendon Press, 19~6.
- Nicoll, Allardyce. Masks, Mimes, and Miracles. London, George G. Harrap and Company, Limited, 1931.
- Nicoll, Allardyce. The Development of the Theater. New York, Harcourt, Brace and Co., 19~7.
- Rice, Emmett. A Brief History of Physical Education. New York. A. S. Barnes and Co., 19~7.
- Strutt, Joseph. Sports and Pastimes of the People of England. London, Printed for Thomas Tegg, 1831.
- Sumner, W. G. Folkways. New York, Ginn and Co., 1906.
- Underhill, John. Poems of John Gay. New York, E. P. Dutton Co., Vol. II.
- Westervelt, Leonidas. The Circus in Literature. New York, Privately Printed, 1931.
- . Our Lady's Tumbler. Translated by Eugene Mason.

Everyman's Library, Volume Aucassin and Nicolette and other Mediaeval Romances and Legends. New York, E. P. Dutton and Co.

Yaggy, L. W., and Haines, T. L. Museum of Antiquity. Chicago, Law, King, and Law Publishing House, 1885.

B. Bulletins and Periodicals

Davies, N. de Garis. The Egyptian Expedition, 1916-17. Supplement to the Bulletin of the Metropolitan Museum of Art. New York, The Metropolitan Museum of Art, March, 1918, pp. 14~3.

The Egyptian Expedition, 19~5-19~7. Section II of the Bulletin of the Metropolitan Museum of Art. New York, The Metropolitan Museum of Art, February, 19~8, pp. 59-7~.

Page, Pierson. Recreative Athletics, Gymnastics, and Games. American Physical Education Review, Sept., 1904, p. ~06.

Post, L. M. The Results of Three Years of Stunts, Contests, and Athletics on the Boys in the Detroit Elementary Schools. American Physical Education Review, Nov., 1917, p. 48~.

Report of Committee of Nine. American Physical Education Review, Sept., 1901, p. ~31.

Whittier, M. D. Physical Training for the Mass of Students. American Physical Education Review, March, 1904, p. ~3.

II. THEORETICAL

A. Books

Anderson, Lenora and McKinley, Florence. An Outline of Physical Education for First and Second Grades. New York, A. S. Barnes and Co., 1930.

Bowen, W. P. Conduct of Physical Activities. New York, A. S. Barnes and Co., 19~7.

Brace, D. K. Measuring Motor Ability. New York, A. S. Barnes and Co., 19~7.

Burton, W. H. The Nature and Direction of Learning. New York, D. Appleton and Co., 19~9.

Committee on Tests for Motor and Organic Efficiency. Physical Achievement Tests for Girls and Women. New York, Women's

- Division, National Amateur Athletic Federation, 303 West 4~d St.
- Comstock, Anna B. Handbook of Nature-Study. Ithaca, New York, Comstock Publishing Co., 19~9.
- Cotteral, Bonnie. Methods of Judging and Scoring Events in Tumbling Meets. New York. A Study Made at Teachers College, Columbia University, 1931.
- Cotteral, Bonnie and Donnie. Tumbling, Pyramid Building, and Stunts for Girls and Women. New York, A. S. Barnes and Co., 19~6.
- Cramlet, T., and Hinote, R. C. Physical Education Activities-A Program of Intramural Gymnastics for Secondary Schools. New York, Dodd, Mead and Co., 193~.
- Cromie, W. J. Pyramid Building. New York, American Sports Publishing Co., Spalding's "Red Cover" Series of Athletic Handbooks, No. 5~R, 19~3.
- Department of Physical Education for Women, University of Michigan. Physical Education Activities for Girls. Philadelphia, Lea and Febiger Co., 19~8.
- Gwathmey, J. T. Tumbling for Amateurs. New York, American Sports Publishing Co., Spalding's "Red Cover" Series of Athletic Handbooks, No. 56R, 19~~.
- Harby, S. F. Tumbling for Students and Teachers. Philadelphia, W. B. Saunders Co., 193~.
- Hawtin, Thomas H. Gymnastic Pyramids. New York, Oxford University Press, 1934.
- La Salle, Dorothy. Play Activities for Elementary Schools. New York, A. S. Barnes and Co., 1931.
- Machery, M. H., and Richards, J. N. Pyramids Illustrated. New York, A. S. Barnes and Co., 193~.
- McClow, L. L. Tumbling Illustrated. New York, A. S. Barnes and Co., 1931.
- Myers, A. F., and Bird, C. C. Health and Physical Education for Elementary Schools. Garden City, New York, Doubleday Doran Co., 19~9.
- Neilson, N. P., and Van Hagen, Winifred. Physical Education for Elementary Schools. New York, A. S. Barnes and Co., 1930.
- Panzer, Henry. A Teachers Manual of Physical Education. New York, A. S. Barnes and Co., 19~8.

- Parker, S. C. General Methods of Teaching in Elementary Schools. New York, Ginn and Co., 1919.
- Pearl, N. H., and Brown, H. E. Health by Stunts. New York, The Macmillan Co., 1921.
- Rodgers, Martin. A Handbook of Stunts. New York, The Macmillan Co., 1928.
- Ruediger, W. C. Principles of Education. New York, Houghton Mifflin Co., 1910.
- Sharman, J. R. Introduction to Physical Education. New York, A. S. Barnes and Co., 19th.
- Thorndike, E. L. Principles of Teaching. New York, A. G. Seiler, 1906.
- Warden, R. D. Exhibition Handbook. New York, A. S. Barnes and Co., 1930.
- Wayman, Agnes. Education Through Physical Education. Philadelphia, Lea and Febiger, Second Edition, 1928.
- Webster's Collegiate Dictionary. Fourth Edition. Springfield, Massachusetts, G. and C. Merriam Co. Copyright, 1916, 1925, 1931.
- Williams, J. F. Principles of Physical Education. Philadelphia, W. B. Saunders Co., Second Edition, 1932.
- Williams, J. F., Dambach, J. J., and Schwendener, N. Methods in Physical Education. Philadelphia, W. B. Saunders, 1932.
- Wittich, W. J., and Reuter, H. C. Exercises on the Apparatus. New York, A. S. Barnes and Co., 1925.
- Wood, T. D., and Cassidy, R. F. The New Physical Education. New York, The Macmillan Co., 1927.
- Worth, H. W. Ground Tumbling. New York, American Sports Publishing Co., Spalding's "Red Cover" Series of Athletic Handbooks, No. 56R, 1922.
- Wynne, J. P. General Method: Foundation and Application. New York, The Century Co., 1929. Present publishers, D. Appleton-Century Co., New York.
- Zwarg, Leopold. Apparatus and Tumbling Exercises. Philadelphia, John Joseph McVey, 1926.

B. Periodicals

- Andrews, Emily R. Tumbling for Girls. American Physical Education Review, Jan., 1927, p. 26.

Baker, F. H. Exercises On the Mats. Physical Training, Jan., 19~0, p.150.

Bottis, Emma, and Evans, Ruth. Tumbling for Grades Four, Five, and Six. American Physical Education Review, March, 19~9, p. 19~.

Braden, G. W. Group Tumbling. Physical Training, Oct., 1910, p. ~7.

Pyramids for Class Work. Physical Training, Nov., 1910, p. 33.

Brittin, H. D. Mat Exercises, Elementary, Individual, and Team Tumbling. Mind and Body: Jan., 1915, p. 440; Feb., 1915, p. 489; March, 1915, p. 543; April, 1915, p. 585; June, 1915, p. 686; Sept., 1915, p. 738; Nov., 1915, p. 815.

Intermediate Team Tumbling. Mind and Body, Dec., 1915, p. 870.

Brock, J. D. Mat Exercises for Boys at Springfield, Massachusetts, Public Schools. Grades V and VI. American Physical Education Review, April, 19~6, p. ~3~.

Cotteral, Bonnie and Donnie. The Romping Rompers, A Tumbling Demonstration. Journal of Health and Physical Education, May, 1930, p. 16.

Cotteral, Bonnie and Donnie. Tumbling for Girls as an Extra-curricular Activity. Scholastic Coach, Jan., 193~, p. 17.

Davis, Sarah R. Selection and Storage of Gymnasium Mats. Journal of Health and Physical Education, Nov., 1934, p. ~6.

Department of Physical Education, Springfield Public Schools. Tumbling, Fifth and Sixth Grade Boys. American Physical Education Review, March, 19~7, p. ~14.

Fritz, E. J. Exhibition Pyramids. The Journal of Health and Physical Education, Feb., 1935, p. 3~.

Hull, C. L. The Computation of Pearson's τ From Ranked Data. Journal of Applied Psychology, 19~~, Vol. VI, p. 385.

Langton, C. V., and Mauthe, C. C. More Pyramids. Journal of Health and Physical Education, March, 1930, p. 36.

Some Pyramids for' Your Demonstration. Journal of Health and Physical Education, Jan., 1930, p. 3~.

Wand Pyramids. Journal of Health and Physical Education, Nov. 1930, p. 3~.

- Machery, M. H. Graded Course In Tumbling and Stunts for Boys. Mind and Body, Dec., 1926, p. 320.
 Graded Course in Tumbling and Stunts for Boys. Mind and Body, Feb., 1927, p. 425.
 Graded Course in Tumbling and Stunts for Girls. Mind and Body, Jan., 1927, p. 369.
 Mat Exercises and Stunts. Mind and Body, June, 1927, p. 132.
 Mat Exercises and Stunts. Mind and Body, November, 1926, p. 287.
 Mat Exercises and Stunts for Boys. Mind and Body, April, 1927, p. 36.
 Mat Exercises and Stunts for Girls. Mind and Body, March, 1927, p. 474.
- McClow, L. L. Clown Tumbling Stunts. Journal of Health and Physical Education, January, 1931, p. 36.
 Clown Tumbling Stunts. Journal of Health and Physical Education, Feb., 1931, p. 32.
- McCulloch, J. H. Introductory Exercises to Tumbling. Journal of Health and Physical Education, Dec., 1930, p. 40.
- McCurdy, J. H. Tumbling and Mat Exercises. American Physical Education Review, Nov., 1925, p. 512.
- McNaughton, Helen B., and Waite, Mildred. A Stunt Contest for the Elementary School. Journal of Health and Physical Education, Oct., 1934, p. 24.
- Scott, H. A. Companion Tumbling. Journal of Health and Physical Education, Sept., 1932, p. 23.
- Tannebaum, N. Ladder Pyramids. Physical Training, Dec., 1910, p. 34.
- Varonok, S. H. The Value of Tumbling. Hygeia, April, 1933, p. 360.
- Whitney, Anne. Health Education Whither Bound. Journal of Health and Physical Education, May, 1933, p. 30.
- Wurl, Otto A. Stunt Drill. Mind and Body, June, 1924, p. 130.
- Zwarg, L. Exercises Upon Apparatus. Mind and Body, Feb., 1923, p. 398.
- . Girls Stunt Drill. (Done to music.) American Physical Education Review, Nov., 1922, p. 445.

III. MUSIC REFERENCES

- Arnold, F. M. Rhythms for Home, Kindergarten and Primary. Cincinnati, Willis Music Co., 1911.
- Colby, Gertrude. Natural Rhythms and Dances. New York, A. S. Barnes and Co., 1926.
- Crawford, Caroline, and Fogg, Elizabeth. The Rhythms of Childhood. New York, A. S. Barnes and Co., 1929.
- Hofer, Mari Ruef. Music for the Child World. Chicago, Clayton F. Summy Co. Vol. **I**, 1900. Vol. **II**, 190~. Vol. **III**, 1911.

INDEX

A

- "A Twister," interpretation of, 291
- Ability, organization of students by, 8j
- Acceptance of stunts and tumbling
 - For girls, 39
 - In the physical education curriculum, 42
- Accidents, 133
- Accompaniment for stunts and tumbling, 6, 11, 12, 13, 26, 51
- Accumulative Stunts, 287
- Acetabuli, 14
- Achilles'
 - Mother, 3
 - Shield, 3
- Acrobat
 - And dancer, 7
 - Carpet, 27
 - In France, 25
 - In Mediaeval Courts, 13
 - In vaudeville, 31
 - Influence on mime, 7, 23
 - Ordered program for, 26
 - Reaction of church against, 12
- Acrobatic
 - Dancing, 3, 7, 17, 31
 - Feats, 10
 - Troupe, 32
 - Women, 8
- Acrobats and Mountebanks, book, 26
- Act of Congress against entertainments, 29
- Activities, stunt and tumbling
 - Couple, 117
 - Group, 117
 - Individual, 117
 - Origination of, 287
 - Selection of for lessons, 117
- Activity, organization of student, 105
- Acts of old Egyptians, book, 22
- Adelphi Academy, 32
- Adjustability of stunts and tumbling, 45, 46
- Adjustment of class and instructor, 74
- Administrative aspects of practice period, 59
- Adventures In The Arts, book, 313
- "Aeroplane," 293
- Age
 - Basis for squad membership, 84
 - Effects upon skill in stunts and tumbling, 46
- Agility
 - Classification of activities by, 114, 120

Agility-Continued

- Definition of, 114
- Ahearn, Johnny, 31
- Aids
 - Verbal, 56
 - Visual, 54
- Aims of stunts and tumbling, 42
 - For girls, 135
- America, tumbling in, 28
- American circuses, 29, 30
- American College of Physical Education, 39
- Americans and circus, 29
- Amon
 - Bark of, 5
 - Dancers of, 5
- Anatomy of Melancholy, book, 24
- Ancient times, tumbling in, 1
- Anderson, William Gilbert, 31, 32, 34
- Andrews, James Douglas, 33
- Animal
 - Eight legged, 208
 - Thousand legged, 212
- Animal leaders and tamers, 12, 14, 16, 24, 29
- Animal Tag, game, 232
- Antique Greek Dance, book, 11
- Antiquity of tumbling, 1, 6
- Antwerp Wheel, 15
- Approval of instructor, 64
- Art and tumbling, 11, 16, 18
- Association of College Directors, 40
- Astley, Philip, 28
- Astley's entertainment, 28
- Atella, 7
- Atellan farces, 7, 23
- Atlantic City, 37
- Augustus, 10
- Awe at tumbling feats, 21

B

- Back bend, of ancient tumblers, 11
- Backward Roll, 157
 - Ball between ankles, 222
 - Continuous, 161
 - Double, 164
 - From Folded Leg Position, 159
 - From Roly-Poly Position, 159
 - Illustration of learning, 63
 - Illustration of quality of performance, 68
 - Partner, 159
 - Presentation of, 52, 56, 63, 157
 - Variations of, 159

- Balance
 Classification of activities by, 114, 115, 116, 122
 Definition of, 115
 Moving, 115, 122
 Stationary, 115, 122
 Balance activities, place in lesson, 118
 Balances, 183
 Chest on Back, 191
 Knee on Back, 195
 Sitting, facing inward, 194
 Sitting, facing outward, 193
 Sitting, feet on thighs, 194
 Standing on knees, facing inward, 197
 Standing on knees, No. 1, 196
 Standing on knees, No. 2, 196
 Swan, 191
 Swan, facing outward, 192
 Swan on Feet of Two Individuals, 192
 Thigh Stand, facing inward, 195
 Thigh Stand, facing outward, 195
 Ball Roll, 162
 Basis for selection of squad members, 84
 Bath, performance of tumblers at, 20
"bby," Egyptian word for dance, 1
 Beast tamers. See Animal leaders and tamers.
 Bending
 Classification of Activities by, 115, 122
 Definition of, 115
 Beni Hasan, book, 2, 314
 Betz, Carl, 35
 Bible, Wycliffe, 18
 Block system for checking stunts, 69
 Boat, circus, 30
 Bodily movement, inherent interest in, 1, 6, 7, 41, 43, 51
 Body build
 Effect upon skill in stunts and tumbling, 45, 46, 52
 Girls' build, 135, 144
 Book About The Theater, A, book, 31
 Bouncing Ball, 51, 205, 292
 Bourbon, Duke of, 25
 Bowen, W. P., 272, 315
 Brace, D. K., 39, 315
 Bridgeworth, performance of tumblers at, 20
 British Museum, II, 18
 British Riding School Entertainment, 28
 Brittany, Vault of, 17
 Brother Acts, 28
 Brown, H. E., 37
 Buffoons, 12, 14
 Burdick, Dr. Wm., 33
 Burton, Robert, 24, 315
 Burton, W. H., 63
- C**
- Callias, 9
 Cardinal Pole, 20
 Carlstrom, C. O., 39
 Carp, leap, 27
 Carpet acrobat, 27
 Carr, Robert, 27
 Cartwheel
 Egyptian, II
 In Rope and Jump, 230
 In Rope, Cartwheel out, 230
 Through Rope, 230
 Castello, Dave, 33
 Castle, Killingsworth, 21
 Cat Walk, 198, 233, 288, 303
 Presentation of, 57
 "Catch," 225
 Cathedrals
 Clermont-Ferrand, 18
 Lincoln, 18
 Causes for dislike of stunts and tumbling, 50
 Censure of tumblers, 12, 14, 20, 22, 30
 Central School of Physical Education, 39
 Ceremonial dancing and tumbling
 In Egypt, 3, 4, 5, 6
 In Greece, 6
 Cernui, 14
 Chain Forward and Backward Roll, 215
 Chain Forward Roll, 214
 Challenge events in stunt and tumbling meets, 273
 Establishment of degree of difficulty of, 282
 Methods of judging and scoring, 274, 282, 283
 Procedure for event in meet, 282
 Chamber Accounts, 20
 Chambers, E. K., 13, 14, 15, 20, 313
 Champagne Vault, 17
 Character of activities, 45
 Characteristics of students, 139
 Characterization of animals and objects, 292
 Charles IX, 22
 Charts to show improvement, 69, 70, 71
 Chautauqua, 32
 Checking accomplishment in stunts and tumbling, 69, 70
 Chest Balance on Back, 191
 Children of Old Woman Who Lived In A Shoe, a demonstration, 309
 Christianity, reaction to mimes, 12, 15
 Christmas Tree and Toys, original project, 292
 Church. See religion.
 Circus
 American, 29, 30
 Boat, 30
 In Mediaeval days, 14
 In Philadelphia, 29
 Mabie's, 30
 Maximus, 10, 29
 P. T. Barnum, 32
 Wagon, 29
 Wixom's, 28
 Circus The, book, 313

- Circus From Rome To Ringling, book, 10, 11, 28, 29, 30
 - Circus In Literature, book, 314
 - Circus Maximus, 10, 29
 - Circus tumbler, 10, 29, 30, 31, 33
 - Civil War, tumbling during, 30
 - Classification of stunt and tumbling activities. See Organizational of stunt and tumbling activities.
 - Clermont-Ferrand, Cathedral, 18
 - Cleveland, stunts and tumbling in schools of, 37
 - Coliseum, 29
 - College
 - American College of Physical Education, 39
 - Central School of Physical Education, 39
 - Normal College of American Gymnastic Union, 39
 - Stunts and tumbling taught in, 31, 32, 33, 36
 - Y. M. C. A. Training School, 33
 - Combination stunts
 - Establishment of degree of difficulty of, 281
 - Establishment of numerical score for, 281
 - Methods of judging and scoring in tumbling meet, 281
 - Origination of, 287
 - Comedy
 - Greek, 7, 8
 - Roman, 7, 8
 - Commedia dell'arte, 22, 23
 - Committee on Tests for Motor and Organic Efficiency, 40
 - Compensation for inability, 69
 - Competition, self, 64, 85
 - Computation of Pearson's t from Ranked Data, 280
 - Conditioning of students to stunts and tumbling, 50
 - Guides to counteract previous conditioning, 51
 - Conduct of Physical Activities, book, 272
 - Conklin, Pete, 30
 - Contests. See Stunt and Tumbling Contests.
 - Continuous Backward Roll, 161
 - From Folded Leg Position, 159
 - From Roly-Poly Position, 159
 - Continuous events in stunt and tumbling meets
 - Establishment of degree of difficulty of, 281
 - Establishment of numerical score for, 281
 - Methods of judging and scoring, 281
 - Continuous Forward Roll, 160
 - Continuous Partner Roll
 - Backward, 161
 - Forward, 162
 - Continuous Rolls, 160
 - Backward Roll, 161
 - Double Backward Roll, 164
 - Double Forward Roll, 163
 - Forward Roll, 161
 - Partner Backward Roll, 161
 - Partner Forward Roll, 161
 - Contributions of stunts and tumbling to the physical education program, 31, 43
 - Contortionists, 13
 - Corkscrew, 52, 236, 291, 296
 - Corrections of faulty performance, 65
 - Costumes for stunt and tumbling demonstrations, 301
 - Cotter ai, Bonnie, 273
 - Cotter ai, Bonnie and Donnie, 39, 51, 58, 119, 156, 233, 235, 237, 241, 246, 288, 296, 303, 307, 310, 316
 - Cotton Library, 17
 - Couple Activities
 - Organization according to, 117
 - Place in lesson, 118
 - Couple Rolls, 162
 - Ball, 162
 - Double Backward Roll, 164
 - Double Forward Roll, 163
 - Partner, 162
 - Couple Stunts, 205
 - Court, 20
 - Court of France, 22
 - Courtesy Roll, 155
 - Courts, 13, 14, 19, 20, 22
 - Coventry, performance of tumblers at, 20
 - Coward's Leap, 27
 - Creative work, 27
 - Desirability of for advanced student, 133
 - Opportunity for in lesson, 119
 - Cricket Walk, 156, 233, 303
 - Cricket Walk Roll, 156
 - Criteria for
 - Appropriateness of organization, 82
 - Judging quality of performance, 274
 - Judging success of method, 76
 - Ranking activities according to degree of difficulty, 276
 - Cromie, W. J., 36, 316
 - Curriculum, physical education in
 - Physical Education Schools, 39
 - University and Colleges, 31
 - Curvet, 27
- D**
- Dance
 - Art form in theater, 8
 - Influence of tumblers, etc., on, 8
 - Dance of Salome, interpretation of, 17
 - Dancers
 - At Norman Courts, 14
 - Egyptian, 3, 5
 - Greek, 3, 9

Dancers-Continued

- In England, 12, 14
- Roman, 8
- Dancing
 - Acrobatic, 3, 7, 17, 31
 - And religion, 3, 5, 6
 - And tumbling, 1, 3, 5, 6, 7, 8, 31
 - Art form in theater, 8
 - In Egypt, 1, 3, 5
 - In Feudal days, 13, 14
 - In Greece, 3, 7, 8, 9, 10
 - In Rome, 8
- Daunsede, 18
- Davidson, W. F., 33
- Davies, N. de Garis, 1, 3, 4, 6, 9, 11, 315
- Davis, W. S., 13, 313
- Decorum of tumblers, 13
- Definition of
 - Learning, 62
 - Tumbling, 1
- Degree of difficulty of stunt and tumbling activities
 - Classification of activities according to, 117
 - Establishment of, 275, 280
 - Rank given activities by experts, 276
 - Tables showing, 277, 278, 279; 280
- Deir el Bahir, 4
- Demonstrating activity, 54, 64
- Suggestions for, 55
- Demonstrations, 297
 - Children of Old Woman Who Lived In A Shoe, 309
 - Costumes for, 3EII
 - Educational values of, 297
 - In The Land of Cotton, 309
 - In Tumble Land, 307
 - International Tumblers, 310
 - King's Jesters, 308
 - Rollicking Raggety Arms, 301
 - Romping Rompers, 307
 - Selection of activities for, 298
 - Selection of participants for, 298
 - Selection of types of, 297
 - Story Book Tumblers, 304
 - Tumbling Through The Ages, 311
- Depping, G., 22, 25, 313
- Description of activities, 56, 57, 58
- Detroit, stunts and tumbling in, 38
- Development of the Theater, book, 314
- Devices for motivation of interest, 68
- Difficulty of activities. See Degree of difficulty of stunt and tumbling activities.
- Diodorus Siculus, 21
- Dionysus, 7
- Discussions, 56, 76
- Dives, 174
 - Fake Dive Over Bodies, 213
 - In Circle Formation, 179
 - In Straight Line Formation, 180
 - Over Body and Through Legs, 177
 - Over Kneeling Individuals, 175

Dives-Continued

- Over Rolled Mat, 175
- Over Supported Bodies, 180
- Over Wand, 176
- Team Dive Through Spread Legs, 177
- Team Shuttle Dive Over Ball, 223
- Through Arch, 181
- Through 'Formation, 182
- Through Hoop, 178
- Through Hoops In a Circle, 179
- Through Hoops and Over Bodies, 179
- Through Loop, 178
- Through Spread Legs, 176
- Diving for
 - Distance, 174
 - Height, 174
- Dorian mime, 7
- Double Backward Roll, 164
- Double Circle Stunt Game, 234
- Double Forward Ron, 163
- Double Walk, 208
- Drama, influence of Roman mime upon, 7
- Drawings of tumbling, 1, 4, 6, 11
- Drum, accompaniment for tumbling, 26
- Ducharte, P., 23
- Duck Walk, 51, 199, 233, 296
- Duke of
 - Bourbon, 25
 - Somerset, 25
- Duruy, V., 313
- Dwarf Walk, 51, 235, 246, 296

E

- Earl of Leycester, 21
- Eastern Society of Association for College Directors of Physical Education For Women, 40
- Education Through Physical Education, book, 40
- Edward II, 19
- Egypt, tumbling in, 1, 3, 4, 5, 6, 9, 11
- Egyptian Expedition, 1916-1917, book, 315
- Egyptian Expedition, 1925-1927, book, 1
- "Egyptian Pyramids," 28, 29
- Egyptian tombs, 1, 4, 6, 9, 11
- Egyptian tumblers, 1, 3, 4, 5, 6, 9, 11
- Ehler, G. W., 34
- Eight Legged Animal, 208
- Elementary School, stunts and tumbling in, 37, 38
- "Elephant," 36
- Elizabeth
 - German princess, 22
 - Queen, 20, 21
- Elizabethan Stage, book, 21
- Emmanuel, Maurice, 11, 313
- Emperor Maximilian, 22
- England
 - "Times in, 12, 13
 - Tumblers in, 12, 13, 14, 211, 28

- English Wayfaring Life In the Middle Ages, book, 18
- Entertainers
- At court, 13, 14, 19, 20, 22
 - At private social occasions, 9, 10
 - Guild of, 15 -
 - Of Queen Elizabeth, 20
 - In America, 28
 - In England, 12, 13
 - In Feudal Days, 13
 - In Prehistoric Times, 6
 - Mimes, 7
 - Term for, 7, 13, 15
 - Wandering, 12, 13, 14, 29
- Entertainments
- Act of Congress against, 29
 - At Mediaeval Fairs, 24
 - Before Queen Elizabeth, 20
 - British Riding School, 28
 - In Rome, 10
 - Of Mediaeval Courts, 13, 14
 - Tumbling as, 6, 7, 9, 10, 13, 19, 20, 23, 24, 25, 27, 28, 29, 30
- Equated squads, 87
- Ethiop, 21
- Eusebius, Pope, 12
- Evaluation of performance
- Instructor's part in, 64, 65, 66
 - Students' part in, 65, 66
- Events
- Basis for judging, 273
 - Basis for scoring, 273
 - Challenge, 273, 274, 282
 - Classification of, 272
 - Compulsory, 272, 273
 - Definition of, 272
 - Methods of judging, 281
 - Methods of scoring, 283
 - Optional, 272, 273, 280
 - Original, 272, 274
- Experience in physical activity, 46
- Explanation of stunts, 56, 57, 58
- Extemporaneous organization of students, 83
- Extended Leg Rocker, 209
- Extracts from Dr. Gwathmey's associates, 34
- F**
- Fable of Two Monkeys, 25
- Fabula Atellana, 7, 23
- Fairs
- European, 29
 - Goose, 25
 - Mediaeval, 24
 - Southwark, 25
 - St. Germain, 25
- Fake Dive Over Bodies, 213
- Faversham, performance of tumblers at, 20
- Fears, 50
- Methods of handling, 52
- Feats of
- Ancient tumblers, 9, 11
 - Fifteenth to eighteenth centuries, 20, 25, 26, 27
 - Harlequin, 23
 - Italian tumblers, 20, 21, 22
 - Mediaeval tumblers, 13, 16
- Female tumblers. See Women Tumblers.
- Festivals, Greek, 6, 10
- Feudal community, 13
- Feudal days, 13
- Fife, accompaniment for tumbling, 13
- Fire-eating, 6, 7
- Fish Flop, 201, 288
- Flexibility
- Classification of activities by, 114, 115, 121
 - Definition of, 115
- Flip-Flap, 25, 31
- Fly-Flap, 25
- Definition of, 26
- Flying Swan, 206
- Folding
- Classification of activities by, 115, 121
 - Definition of, 115
- Follow the leader, 110
- Folkways, book, 314
- Forearm Stand, 189
- Formal method, 58, 73
- Formation of students and equipment on floor space, 90
- Combination of square and line formation, 103
 - Corners of square, 98
 - File formation behind mats, 95
 - Four line formation, 96
 - Four squads and one row of mats, 102
 - Informal grouping around one activity, 91
 - Informal grouping around two activities, 92
 - Lanes of activities, 105
 - Line formation, 93
 - Mats placed in cross formation, 104
 - Semi-circle formation, 94
 - Square formation, 97
 - Triangular formation, 99
 - Two line formation, 100
 - Two squads and one row of mats, 101
- Formula for Percent Position, 276
- Forward Roll, 151
- Ball Between Ankles, 222
 - Chain Forward, 214
 - Chain Forward and Backward, 215
 - Continuous, 160
 - Double, 163
 - From Moving Approach, 156
 - From Stationary Approach, 151
 - Through Rope, Back Door, 229
 - Through Rope, Front Door, 228, 30a
 - Variations of, 153
 - With Stool, 223
- Forward Roll Relay, 251

- France, tumbling in, 22, 25
 Free shows, Rome, 10
 French vault, 17
 Frog Hop, 51, 200, 233, 296
 Funambuli, 14
 Fundamental movements, 116
- G
- Games, stunt and tumbling, 231
 Animal Tag, 232
 Double Circle Stunt Game, 234
 Interest in, 51, 231
 London Bridge, 236
 "Notes," 236
 Origination of, 288
 Roll Along, 239
 Run The Scale, 240
 Show Me, 242
 Stumping, 243
 Tumbling Golf, 244
 Tumbling Reel, 248
- Gay, John, 25
 General History of World, book, 313
 General Method: Foundation and Application, book, 62
 General Methods of Teaching in Elementary Schools, book, 50
 George Washington, 29
 Gesnerus, Conrad, 22
 Gifts to tumblers, 13, 14, 19
 Girls
 Physical characteristics, 135, 142, 144
 Tumbling for, 135
 "Git up Napoleon," 207, 296
 Gleemaidens, 13
 Gleeman, 13
 Goldie, George, 33
 Goose Fair, 25
 Goure, Jacques, 15
 Grades, teaching stunts and tumbling in
 Intermediate, 141
 Junior high, 144
 Primary, 138
 Senior high, 146
 Grading Activities, 67, 117, 118, 277
 Grallatores, 14
 Great Devil, A La Mephistopheles, 28, 29
 Greece
 Dancing in, 3, 8, 9
 Tumbling in, 3, 6, 8, 9
 Greek
 Comedy, 7
 Dancing, 3, 8, 9
 Festivals, 6, 10
 Mime, 7
 Tragedy, 8
 Greenwood, I., 313
 Ground tumbling, 11, 32, 33
 Group Activities
 Place in lesson, 117, 118
 Rank of, 279
 Group stunt and tumbling contests, 261
 Number, 265
 Representative, 268
 Team challenge, 267
 Team efficiency, 266
 Group Rolls, 165
 Shuttle, 168
 Team, 169
 Triple, 165
 Triple Forward, Skaters' Position, 168
 Triple Jump, 166
 Group Stunts, 211
 Grouping for squads
 Heterogeneous, 84, 86
 Homogeneous, 84, 85
 Guides for Motivation, 51
 Guild of tumblers, 51
 Gulick, Dr. L., 33
 Gwathmey, J. T., 33, 316
- H
- Hair of Egyptians tumblers, 4, 5
 Handbook of Stunts, A, book, 119
 Handspring, 11
 Handstand, 189
 Ancient tumbling, 11
 And Over Back, 211
 On crocodile, 11
 On Knees, 190
 On Knees Facing Outward, 190
 Over Kneeling Bodies, 221
 Partner, 210
 Harby, S. F., 119, 316
 Harlequin, 23
 Hartley, Marsden, 313
 Harzberg, Hiler, and Moss, 23, 314
 Head Roll Over Bodies, 220
 Headspring Over Mats, 226
 Headstand, 183
 From Folded Leg Position, 186
 From Lying Down Position, 185
 From Tip-up Position, 183
 Held by Standing Person, 188
 Illustration of teaching by problem solving method, 78
 In Partner's Lap, Facing Inward, 188
 In Partner's Lap, Facing Outward, 188
 Kicking Legs in Position, 185
 Lifting Extended Legs, 185
 Moving Arms, 187
 Moving Base, 187
 Moving Legs, 186
 Health By Stunts, book, 38
 Height, as basis for selection of squad members, 84
 Henry VIII, 19
 Here We Go Up, rhyme, 290
 Herod, 17
 Herodias, 17
 Heterogeneous grouping
 Advantages and disadvantages of, 84, 85

Heterogeneous *grouping-Continued*

Organization of student activity by, 106

Place in tumbling class, 86

High school, stunts and tumbling in, 47

Historical records, early, 1

Historical Sketch of Tumbling, 1

Hlstriones, 12

Hitchcock, E. Jr. and Sr., 34

Homer

Iliad, 3, 314

Odyssey, 9, 314

Homogeneous grouping

Advantages and disadvantages of, 85

Application to tumbling, 88

Organization of student activity, 108

Place in tumbling class, 86

Hoops, 9, 11, 13, 14, 26, 29

Hospital, St. Julian, 15

Hull, C. L., 280

Human Knot, 295

Human Wicket Relay, 252

Humprey Martin, 21

Humpty Dumpty, rhyme, 290

Humpty Dumpty Roll, 155

I

Iliad, 3

Illustrations, suggestions for, 54

Imitation

Interest in, 51

Learning by, 54

Improvement Day, 109

Improvement, student practice' for, 62

In The Land of Cotton, stunt and tumbling demonstration, 309

In Tumble Land, stunt and tumbling demonstration, 307

Inability, compensation for, 69

Indianapolis, stunts and tumbling in schools, 37

Individual Activities, 117

Rank of, 277

Individual Stunt and Tumbling Contests, 270

Ladder, 270

Stumping Game, 243

Tumbling Golf, 244

Individual differences, 45, 52, 57, 61

Individual Stunts, 198

Influences of tumbling on theater, 6

Informal method, 74

Inherent interest in bodily movement, 1, 6, 7, 41, 43, 51

Injuries, effect of, 52

Instruction, 58, 66

Instructor

Administration of practice period, 59

Overcrowding lesson, 62

Part in improvement process, 64

Part in non-improvement, 65

Position in explaining activity, 58

Qualifications to correct mistakes, 65

Realization of objectives, 44

Instructor-Continued

Roles of, 65

Voice, 58

Interest

Factor in learning process, 49

In action' of people and animals, 50

In imitation, 51

In rhythm, 50

Inherent in bodily movement, 1, 6, 7, 41, 43, 51

Interests

Innate and natural, 43, 50

Motivation of, 49, 60

Intermediate grades

Characteristics of children, 141

Stunts and tumbling in, 141

International Tumblers, demonstration, 310

Interpretation of Rhymes, See Rhymes.

Introduction of stunts and tumbling in

American Colleges, 31

American Elementary Schools, 37

American High Schools, 37

American Professional Schools, 39

Ioculator, 15

Italian Comedy, book, 23

Italian tumblers, 20, 21, 22, 23

Italy, 22

J

Jack and Jill, rhyme, 290

Jack Be Nimble, rhyme, 289

Jack In The Box, 292

James I, 25

Jingles, See Rhymes.

Jogeler, 15

John The Baptist, 17, 18

Joints, use of, 135, 139

Jongleresses, 15

Jongleurs, 14, 15

Judges for meets. See officials for stunt and tumbling meets.

Judging performance, 68

Jugglers

Associated with dancers, 7, 8, 10, 12, 14, 16

Associated with tumblers, 7, 10, 12, 14, 16, 24, 25

In England, 12, 25, 26

In France, 15

Influence on mime, 7

Separation from tumblers, 15

Juggling, 6

Jump and Roll Relay, 254

Jump, Clap Hands, Roll, 157

Jump, Clap Hands, Roll making square, 157

Jump Foot, 294

Jump, Roll, 157

Jump, Roll, making square, 157

Jump The Stick, 67, 235, 295, 310

Jump Through The Hands, 202, 246

Jumping

'Classification of activities by, 115, 120

Definition of, 115

- Jumping Rope On All Fours
 Facing Rope, 227
 Side of body to rope, 227
 Junior high school
 Characteristics of students, 145
 Stunts and tumbling in, 145
 Jusserand, J. A., 18, 25, 314
- K**
- Kangaroo Relay, 255
 Kenamun, tomb of, I
 Kentucky colonel, 30
 Kicking
 Classification of activities by, II5, 121
 Definition of, II5
 Killingsworth Castle, 21
 Kings
 Charles IX, 22
 Edward II, 19
 Henry VIII, 19
 James I, 25
 Louis XV, 25
 Norman, 26
 King's Jesters, 308
 Knee Balance On Back, 195
 Knee Dip, 68, 235, 246, 295
 Knossus, tumblers of, II
 Knowledge of results, 69
 Komos, 7
 Kubisteteres, 9, II
- L**
- Lacroix, P., 15, 24, 26, 314
 La Force d'Hercule, 28
 Ladder, 71
 Ladder Contest, 270
 Lamprey, 22
 Laneham, Robert, 21
 Law
 Of Effect, 51, 62
 Of Exercise, 59, 62
 Lawrence, James, 28
 Le Roux, H., 26, 314
 Le Grand Sault du Trampoline, 28
 Leap
 Carp, 27
 Coward's, 27
 Leaping
 In England, 26
 Through barrels, 26
 Through hoops, 26
 Over horses, etc., 29, 32
 Learner, 49, 72
 Learning
 By imitation, 54
 Definition of, 62
 Place of practice in, 59
 Trial and error, 63
 Trial and success, 63
 Leg Over Leg, rhyme, 290
 Lessons
 Flexibility of, II8
 Planning for, II7
 Selection of materials for, II7
- Letter by Robert Laneham, 21
 Leycester, Earl of, 21
 Library
 Cotton, 17
 Royal, 17
 Life On Mediaeval Barony, book, 13
 Lifting
 Classification of activities by, II5, 123
 Definition of, II5
 Lincoln Cathedral, 18
 Literature and tumbling, 3, 9, 14, 16, 17, 21, 25
 Lofty tumbling, II, 32, 33
 London Bridge, game, 236
 Long Legged Sitting, 202
 Long Scooter, 2II
 Lord Bath, 19
 Lorrain, Huet Ie, 15
 Lorraine, Vault of, 17
 Los Angeles, stunts and tumbling in schools of, 39
 Loughlin, Dave, 33
 Louis XV, 25
 Love for sight seeing of people of Middle Ages, 24
 Ludlow, performance of tumblers at, 20
 Luxor, temple of, 6
- M**
- Manipulating body, I, 41, 43, 51
 Manners, Customs, and Dress During Middle Ages, book, 15
 Mark V:r..verse 22, 18
 Martin, John, 8
 Martin, Master Humprey, 21
 Mary, Queen, 20
 Masks, Mimes and Miracles, book, 7, 8, 12, 20, 22
 Master Sheet For Participants in Demonstration, 300
 Material
 Organization of, II4
 Selection for lesson, II7
 Mats
 Care of, 136
 Covering, 136
 Filling, 136
 Hanging, 137
 Platform for, 137
 Size, 136
 Matthew XIV, verse 6, 18, 314
 Matthews, B., 31
 Maximilian, Emperor, 22
 May, E. C., 10, II, 28, 29, 30, 314
 McClow, L. L., II9, 316
 McKenzie, R. T., 33, 35
 Measuring Motor Ability, book, 39
 Mediaeval
 Courts, 13
 Fairs, 24
 Story, 16
 Mediaeval Stage, book
 Vol. I, 13, 14
 Vol. II, 15

Meets. See Stunt and Tumbling Meets.
 Menelaus, 9
 Mental Contribution of Stunts and Tumbling, 43
 Merry-Go-Round
 No.1, 217
 No.2, 218
 No.3, 219
 No.4, 219
 Methodist Episcopal Church South, 34
 Methods In Physical Education, book, 61
 Methods of Accident prevention, 132, 133
 Methods of scoring
 Competitions similar to tumbling, 273
 Events in stunt and tumbling meets, 273, 283
 Methods of teaching
 Criteria for evaluation of success of, 76
 Formal, 73
 Informal, 74
 Problem solving, 77
 Metz
 Somersault of, 17
 Vault of, **a**
 Mime (performance)
 In Greece, 7
 In Rome, 7, 8, 22
 Mimes (performers)
 And tumblers, 7
 At Mediaeval courts, 13
 Dorian, 7
 Grecian, 7
 Guilds of, 15
 In England, 12, 13
 In towns, **a**, 15
 Reaction of Church to, 12
 Roman, 7, 12, 22, 23
 Women, 8
 Mimi, the, 12
 Minestrelles, 15
 Minestreus, 15
 Ministelles, 15
 Ministers, 20, 30
 Ministrallus, 15
 Minstrels, 13, **a**, 16, 24
 Miscellaneous Organization, 109
 Follow the Leader, 110
 Improvement Day, 109
 Monkey
 Fable of Two Monkeys, 25
 Somersault, 27
 Walk, 233
 Monks, **a**, 19
 Montgomery, B. and Perry, G., 305
 Morgan's Guerrillas, 30
 Motivation
 Devices to interest student in improving quality of performance, 68
 Guides to aid, 51
 Use of imitation in, 51
 Use of music in, 51
 Use of rhythm in, 51
 Use of stunt and tumbling games in, 51

Motor ability, definition of, 39
 Motor ability tests, 39
 Motor picture, 57
 Moving balance, 115, 122
 Music for tumbling, 6, 11, 12, 13, 26, 51
 Musical instruments, 6, 12, 13, 26

N

Names of Activities, use in presentation, 57
 Natural Activities, 37
 Natural program, 37
 Natural relation of students, 76
 Nature and Direction of Learning, book, 63
 Negative instruction, 58, 66
 Nelligan, R. F., 34
 New English Dictionary on Historical Principles, 13
 Newberry, P., 2, 314
 Nicoll, A., 7, 8, 12, 20, 22, 314
 Noninterest, causes of, 50
 Nonsuccess, 65
 Normal College of the American Gymnastic Union, 36
 Norman monarchs, **a**, 26
 Norton, Thomas, 20
 "Notes," a musical game, 238
 Nottingham, performance of tumblers at, 20
 Number of performers
 Couple, 117
 Group, 117
 Individual, 117

O

Objectives of stunts and tumbling, 44
 Odyssey, 9
 Officials of stunt and tumbling meets, 283
 Procedures when scoring events in meet, 283
 One, Two, Three Relay, 256
 Opening The Rose, 51, 307
 Opera, tumbler engaged for, 28
 Optional events in stunt and tumbling meets, 272
 Basis for judging and scoring, 273, 275, 283
 Establishment of degree of difficulty of, 275, 280
 Establishment of numerical score for, 275, 280
 Ordered program for tumblers, 26
 Organization
 Criteria for judging, 82
 During practice period, 61, 68
 Extemporaneous, 83
 Flexibility of, 82
 Influence of in accomplishment, 82
 Miscellaneous, 109
 Phases of, 82
 Suggestions for, 110
 Types of, 83

- Organization for stunt and tumbling classes, 82
- Organization of material, according to Demands made upon individual, 114
- Difficulty, 117
- Number of performers, 117
- Tumbling terms, 116
- Organization of Student Activity, 82, 105
- Criteria for selection of, 105
- Heterogeneous Squads, 106
- Homogeneous Squads, 108
- Individuals from Squads Progressing, 108
- Instructor Progressing, 109
- Miscellaneous, 109
- Nonprogressing type, Instructor Presenting Activity, 106
- Nonprogressing type, Squad Leaders Presenting Activity, 106
- Squad Leaders Progressing, 107
- Squads Progressing, 107
- Organization of students, 83
- Basis of, 83
- By ability, 46, 84
- Class, 83, 90
- Extemporaneous groupings, 83
- Squads, 83
- Teams, 83, 89
- Original Events in stunt and tumbling meets, 272
- Basis for judging and scoring, 274, 281, 283
- Establishment of degree of difficulty of, 281
- Establishment of numerical score for, 281
- Original Projects, 287
- Origination of
- Accumulative stunts, 287
- Characterization of animals and objects, 292
- Combination stunts, 287
- Games, 288
- Interpretation of rhymes, 289
- Stories, 293
- Stunt and tumbling activities, 287
- Our Lady's Tumbler, Mediaeval story, 16
- P**
- Palmy days of minstrels, 16
- Parker, S. C., 50, 317
- Paris, 15
- Participation of students, 53, 56, 59, 65, 72, 82, 105
- Partner Backward Roll, 159
- Partner Handstand, 210
- Partner Rolls, 162
- Pastimes, leniency toward, 24
- Pearl, N. H., 37
- Pearl, N. H. and Brown, H. E., 37, 38, 51, 52, 67, 119, 233, 235, 237, 246, 295, 296, 308, 310, 317
- Percent position, 276
- Performance
- Effect of age on, 46
- Effect of body build on, 45
- Effect of experience on, 46
- Judging quality of success in, 341
- Satisfaction in, 51, 62, 68
- Petaminarii, 14
- Petauristae, 14
- Pettit, H., 33
- Pfister, F., 34
- Philadelphia, stunts and tumbling in schools of, 37
- Physical Achievement Tests for Girls and Women, 40
- Physical contributions of stunt and tumbling activities, 43
- Physical differences, 45, 52
- Physical education program
- Activities in, 42
- Purpose of, 42
- Stunts and tumbling part of, 42
- Physical educators
- Training in tumbling, 31, 39
- Physical efficiency test for College Freshman Women, 40
- Physical training, 31, 32, 37
- Physical training teachers, preparation of, 31
- Physiological make-up of girls, 135
- Pictograph from tomb of Kenamun, 1
- Place of Stunts and Tumbling in the Physical Education Program, 42, 45, 47
- Placide, A., 29
- Poems
- Fable of Two Monkeys, 25
- Iliad, 3
- Odyssey, 9
- Old Latin, 14
- Pyramid, 29
- Poems of John Gay, book, 25
- Pole, Cardinal, 20
- Pompey, 10
- Pope Eusebius, 12
- Popularity of stunts and tumbling, 6, 47
- Position of instructor while teaching, 58, 90, 91, 93, 95, 96, 97, 100
- Positive instruction, 58
- Posturing, of acrobat in ordered program, 27
- Practice, 59
- Application of psychological findings, 59
- Direct versus incidental, 60
- Place of in learning, 59
- Responsibilities of instructor for, 61
- Spirit of, 64
- Use of repetition in, 59, 61
- Practice for Improvement, 67
- Instructor's part, 61, 65, 66, 67, 72
- Student's part, 72
- Practice period
- Administrative aspects of, 59
- Aim of, 62

Practice *period-Continued*

- Distribution of, 60
- Interval between, 60
- Length of, 60
- Time allotment of, 61
- Use of demonstrations in, 64, 67
- Praestigiatores, 14
- Predicaments of Peter, stunt story, 294
- Presentation of Stunts and Tumbling, 53
- Primary grades
 - Characteristics of children in, 138, 139, 140
 - Tumbling in, 138, 139, 140
- Principles of Education, book, 66
- Principles of Physical Education, book, 317
- Principles of planning stunt and tumbling lessons, 117
- Principles of Teaching, book, 54
- Problem solving method, 77, 78
- Problems
 - List of, 79
 - Related, 79
 - Solving of, 79
 - Technical, 79
- Program, natural, 37
- Progression in stunts and tumbling, 52, 67, 117, 118
- Projects, original, 287
- Psychological contributions of stunts and tumbling, 43
- Psychological principles applied to tumbling practice, 59, 60, 61
- P. T. Barnum Circus, 32
- Pulling
 - Classification of activities by, 116, 123
 - Definition of, 116
- Pushing
 - Classification of activities by, 116, 123
 - Definition of, 116
- Pyramid
 - Astley's entertainment, 28
 - "Egyptian," 28, 29
 - Methods of judging in stunt and tumbling meets, 283
- Pyramid Building, book, 36

Q

- Quality of performance
 - As basis for judging and scoring tumbling meets, 274
 - Criteria for judging, 274
 - Devices for motivation in improving, 68
 - Interest in improving, 68
 - Scale for judging, 275
- Queen Elizabeth, 20
- Queen Mary, 20
- Queen's Tumblers, 20
- Quincy, Illinois, 82

R

- Rabbit Jump, 51, 200, 233, 296

Races

- Scooter, 259
- Scooter Rescue, 260
- Walking Chair, 262
- Ramesside era, 11
- Ranking of activities
 - By expert opinion, 276, 277, 278, 279
 - Combination activities, 281
 - Continuous activities, 281
 - Criteria for, 276
 - Optional events, 280
 - Transmutation of rank into numerical scores, 280
- Raycroft, J. E., 33
- Reel, tumbling, 248
- Relays. See Stunt and Tumbling Relays.
- Religion and tumbling in
 - America, 28, 30
 - Egypt, 3, 4, 6
 - Fifteenth to eighteenth centuries, 20
 - Greece, 6
 - Middle Ages, 12, 14, 15, 16, 18, 19
- Remuneration of tumblers, 13, 19
- Repetition in practice, 59, 61
 - Necessity for, 61
- Requirement for participation in stunt and tumbling activities, 47, 48
- Rhymes, interpretation of
 - A Twister, 291
 - Here We Go Up, 290
 - Humpty Dumpty, 290
 - Jack and Jill, 290
 - Jack Be Nimble, 289
 - Leg Over Leg, 290
 - Ride a Cock Horse, 291
 - Robert Rowley, 291
- Rhythmic interest, 50
- Riccoboni, 23
- Ricketts, John Bill, 29
- Ride a Cock Horse, rhyme, 291
- Robert Rowley, rhyme, 291
- Roberts, Robert J., 34
- Rocker, Extended Leg, 209
- Rocking Horse, 293
- Rocking Stunt, 51, 208, 292, 303, 306, 308
- Rodgers, M. A., 119, 317
- Roll Along Game, 239
- Roll Ball Relay, 258
- Rollicking Raggety Arms, stunt and tumbling demonstration, 301
- Rolling, 116
- Rolls, 151
 - Backward, 157
 - Backward, Folded Leg position, 159
 - Backward, Roly-Poly position, 159
 - Ball, 162
 - Ball Between Ankles, 222
 - Between Indian Clubs, 272
 - By couples from line, 172
 - Chain Forward, 215
 - Chain Forward and Backward, 215
 - Clap hands, 155
 - Continuous Backward, 161
 - Continuous Forward, 160

Rolls-Continued

- Continuous Partner, 161
- Couple, 162
- Courtesy, 155
- Cricket Walk and Roll, 156
- Double Backward, 164
- Double Forward, 163
- Forward, 151
- From rolled mat, 155
- From run, 156
- From skip, 151
- Group, 165
- Head Roll Over Bodies, 220
- Humpty Dumpty, 155
- Jump, 157
- Jump, clap hands, 157
- Jump, Clap, Roll, making square, 157
- Jump, Roll, making square, 157
- Partner, 162
- Partner Backward, 159
- Progressive, in square, 172
- Sailor, 155
- Sailor Fashion, 156
- Shuttle, 168
- Shuttle, With Ball, 224
- Sideward, 204
- Sideward Rolls and Leap, 216
- Soldier, 154
- Stride Jump, 157
- Tailor Fashion, 155
- Team, 169
- Team Progressive, 172
- Team Sideward Rolls and Leap, 217
- Triple, 165
- Triple Forward Roll, Skater's Position, 168
- Triple Jump, 166
- Whistling, 155
- Roly-Poly, 51, 57, 233, 246, 291, 292, 306
- Meaning of word, 57
- Roman
 - Comedy, 7, 8
 - Dancers, 8
 - Entertainments, 10
 - Free Shows, 10
 - Mimes, 7, 12, 22, 23
 - Mimic drama, 7
 - Theater, 7, 8
 - Vault, 17
- Rome, 10, 11
- Romping Rompers, a stunt and tumbling demonstration, 307
- Rondade, 27
- Rope dancers, 11, 29
- Rope walkers, 14
- Royal Library, 17
- Royalty, 19
- Rue des Jongleurs, 15
- Rue St. Martin, 15
- Ruediger, W. C., 66, 317
- Run The Scale Game, 240
- Running
 - Classification of activities by, 115, 120
 - Definition of, 115
- Safety, 132
 - Elements of danger in activities, 35, 52, 119
 - Procedures for, 133
 - Promotion of by instructor, 133, 138
 - Standards for, 134, 138
- Sailor Fashion Roll, 156
- Sailor Roll, 155
- Salome, 17, 18, 19
- Saltator, 7
- Sanniones, 14
- Sargent, Dudley, 33
- Satisfaction in performance, 51, 62, 68
- Saxon, Princes, 14
- Scale for Judging Quality of Performance, 274, 275
- Scale of Motor Ability Tests, 38
- School of Physical Education, Chautauqua, 32
- Scooter Race, 259
- Scooter Rescue Race, 260
- Scooter, the, 209
- Scoring for Stunt and Tumbling Meets, 283
 - Suggested final scoring sheet, 286
 - Suggested procedures of officials, 283
 - Suggested scoring form, 285
 - Tie Scores, 284
- Scurrae, 14
- Selection of
 - Activities for girls, 135
 - Activities for tumbling demonstrations, 298
 - Material for lessons, 117
 - Participants for demonstration, 298
 - Responses, 63, 65
 - Squad members, 84, 87
 - Types of tumbling demonstrations, 297
- Self activity, 59, 63, 65, 74
- Self expression, 76
- Self Motivating, 49
- Senior high school
 - Characteristics of senior high school students, 146, 147
 - Teaching of stunts and tumbling in, 146, 147
- Shoulder Rest, 53
- "Show Me" Game, 243
- Shows
 - Free Roman, 10
 - Mud-, 29
 - Wagon, 29
- Shuttle Roll, 168, 303
 - With Ball, 224
- Siculus, Diodorus, 21
- Sideward Roll, 204
- Sideward Rolls and Leap, 216
- Sistrums, 6, 12
- Sitting Balance
 - Facing inward, 194
 - Facing outward, 193
 - Feet on thighs, 194
- Skill of Tumblers. See Feats.

- Skilled divisions, 85
- Skin The Snake Through Legs, 214
- Slap Stick and Dumbbell, book, 23
- Snail Stunt, 53, 289
- Social contributions of stunts and tumbling, 43
- Social needs of students, 84
- Socialized Activity, 74, 76
- Socrates, 9
- Soldier Roll, 154
- Somersaults
 - Ancient, 11
 - Arab, 27
 - At Mediaeval Courts, 13
 - Forward, 27
 - In** 1500-1800, 26
 - Lion, 27
 - Metz, 17
 - Monkey's, 27
 - Of Harlequin, 23
 - Over horses, etc., 28
 - Over sharp pointed swords, 11
 - Reduced, 22
 - Through hoop, 9, 11
 - Word, 25
- Somerset
 - Duke of, 25
 - Word, 25
- Sopraselto, 26
- Soubresault, 26
- Spalding's Red Cover Series, 34, 36
- Spanish Vault, 17
- Spectacles
 - Roman, 10
 - Royal, 24
- Spider Walk, 199, 305
- Sports and Pastimes of English People, book, 12
- Springing
 - Classification of activities by, 115, 120
 - Definition of, 115
- Springs
 - Head Spring Over Mats, 226
 - Tumbling term, 115
- Sputh, C., 36
- Squad Leaders, III
 - As teachers of stunt and tumbling activities, 112
 - Responsibilities of, III, 112
 - Standards for, 112
- Squad leadership situations, 112
- Squads
 - Administration of in informal method, 75
 - Basis for selection of members, 84
 - Equated, 87
- St. Germain, 25
- St. Julian, 15
- St. Louis, stunts and tumbling in schools of, 37
- St. Zeno, 18
- Standards for
 - Instructor, 137
 - Safety, 133, 134
- Standards *for-Continued*
 - Squad leaders, 112
- Standing Balance on Knees
 - Facing inward, 197
 - No.1, 196
 - No.2, 196
- State of readiness, 50, 53
- Stationary balance, 115, 122
- Stecher, W., 34
- Stilt walkers, 14
- Stories, stunt and tumbling, 293
 - Predicaments of Peter, 294
 - Themes, 296
- Story Book Ball, the, song, 305
- Story Book Tumblers, the, demonstration, 304
- Strength
 - Classification of activities by, 114, 115, 123
 - Definition of, 115
- Stride .Jump Roll, 157
- Strong Men, 14
- Strutt, J., 12, 13, 14, 17, 19, 26, 314
- Student practice for improvement, 62
- Students
 - Characteristics of, 138
 - Conditioned to the learning of stunts and tumbling, 50
 - Fears of, 50, 52
 - Integrated personality, 44, 45, 132
 - Participation in verbal aids, 56
 - Physical condition, 53, 135
 - Physical differences, 45, 52
 - Reaction to stunts and tumbling, 45, 46, 53
 - Reaction while learning stunts and tumbling, 45, 49
- Stumping Game, 243
- Stunt and Tumbling Activities
 - Adjustability to students' capacities, 46
 - As physical education activities, 42
 - As test items, 39
 - Character of, 45
 - Compensation for lack of ability in, 69
 - Contribution to the physical education program, 42, 43
 - Effect of age on performance of, 46
 - Effect of body build on performance of, 46
 - Effect of experience on performance of, 46
 - Evaluation of, 43
 - Objectives of, 44
 - Origination of, 287
 - Place of in physical education program, 42, 45, 47
 - Progression in, 46, 52, 67, 117, 118
 - Purpose of in physical education program, 42
 - Requirements for participation in, 47, 48
 - Stories including, 293
 - Students' reactions to, 45, 46, 53
 - Teaching procedures for, 49

- Stunt and Tumbling *Activities-Cont'd*
 Unpleasant sensations in participation
 of, 50, 53
- Stunt and Tumbling Contests, 264.
 Classification of, 264.
 Contributions of, 264.
 Ladder, 270
 Stumping Game, 24.3
 Team Challenge, 267
 Team Efficiency, 266
 Team Number, 264.
 Team Representative, 268
 Tumbling Golf, 244
- Stunt and Tumbling Demonstrations, 297
 Children of Old Woman in Shoe, 309
 In Land of Cotton, 309
 In Tumble Land, 307
 International Tumblers, 310
 King's Jesters, The, 308
 Rollicking Raggy Arms, 301
 Rompng Rompers, 307
 Story Book Tumblers, The, 304.
 Tumbling Through The Ages, 311
- Stunt and Tumbling Games, 231
 Animal Tag, 232
 Double Circle Stunt, a musical game,
 234.
 London Bridge, a singing game, 236
 "Notes," a musical game, 238
 Roll Along, a musical game, 239
 Run The Scale, a musical game, 240
 Show Me, 24.2
 Stumping, 24.3
 Tumbling Golf, 24.4.
 Tumbling Reel, a musical game, 24.8
 Ups and Downs, 250
- Stunt and Tumbling Meets, 272
 Classification of, 272
 Definition of, 272
 Events in, 272
 Individual, 272
 Judges in, 283
 Judging, 273
 Number of trials in, 284.
 Scoring of, 283
 Team, 272
 Winner of, 284.
- Stunt and Tumbling Relays and Races,
 251
 Forward Roll Relay, 251
 Human Wicket Relay, 252
 Jump and Roll Relay, 254.
 Kangaroo Relay, 255
 One, Two, Three Relay, 256
 Roll Ball Relay, 258
 Scooter Race, 259
 Scooter Rescue Relay, 260
 Submarine Roll Relay, 261
 Walking Chair Relay; 262
- Stunts, 198
 Basis of tumbling course, 118
 Couple, 205
 Group, 211
 Individual, 198
- Stunts-Continued*
 With apparatus, 221
 Submarine Roll Relay, 261
 Success
 And failure method of judging per-
 formance, 68
 As a stimulating motive, 51, 64., 68, 69
 Of Method, 76
 Suggestions for organization, 110
 Sumner, W. G., 314
 Supervision of Stunts and Tumbling, 132
 Characteristics of students and appli-
 cation to tumbling, 138
 Equipment, 136
 Safety, 132
 Tumbling for girls, 135
- Supporting
 Body weight inverted, 116
 Weight, 115, 123
 Swagger Walk, 201, 296
 Swan Balance, 191, 293
 Facing outward, 192
 On feet of two individuals, 192
 Sword swallowing, 6
- T
- Tabor, 13
 Tabouretts, 19
 Tailor Fashion Roll, 155
 Tangle, 51, 203, 236, 246, 294
 Tatler, 28
 Teacher
 Early teachers of tumbling, 33
 Function in learning process, 49
- Teaching
 Procedures, 49
 Student as integrated personality, 44,
 45
- Team Challenge Contest, 267
 Team Dive Through Spread Legs, 177
 Team Efficiency Contests, 266
 Team Number Contest, 264
 Team Progressive Rolls, 172
 Team Representative Contest, 268
 Team Rolls, 169
 Alternate Team Roll from one side of
 mats, 170
 One Team Forward Roll, One Back-
 ward Roll from opposite sides of
 mats, 170
 Progressive Rolls In Square, 172
 Roll By Couples From Line, 172
 Team Forward and Backward Roll
 from one side of mats, 170
 Team Progressive Rolls, 172
 Team Roll, Clap, Jump, Turn, 171
 Team Roll from one side of mat, 169
 Team Roll, Jump, Turn, 171
 Team Sideward Rolls and Leap, 217
 The Scale, 171
 Two Teams Roll, Clap, Jump, Turn,
 171
 Two Teams Roll from opposite sides
 of mats, 170

Team *Rolls-Continued*

- Two Teams Roll, Jump, Turn, 171
- Team Shuttle Dive Over Ball, 223
- Team Sideward Roll and Leap, 217
- Temples
 - Deir el Bahri, 4
 - Luxor, 6
- Ten Pins, characterization, 292
- Terpsichorean, 8
- Tests for
 - Motor Ability, 39
 - Physical Achievement, 40
 - Physical Efficiency, 40
- Theater
 - Dance as art form in, 8
 - In America, 30
 - In England, 27
 - In Feudal days, **a**
 - In Greece, 7, 8
 - In Rome, 7, 12
 - Influence of tumblers on, 6, 7
 - Women in, 8
- Themes for stunt and tumbling demonstrations, 297
- Themes for Stunt and Tumbling Stories, 296
- Thetis, Achilles' Mother, 3
- Thigh Stand Balance
 - Facing inward, 195
 - Facing outward, 195
- Thorndike, E. L., 54, 317
- Thousand Legged Animal, 212, 296
- Time allotment for activities in lesson, 61
- Tip-IJp, 183, 246, 288
- Tombs
 - Egyptian, 4
 - Kenamun, 1
- Tombeors, 13
- Tomber, 13
- Tombestores, 13
- Tombolan, 13
- Tommelen, 13
- Top, the, 51, 235
- Tornatrices, 13
- Towns
 - Beginnings of, **a**
 - Tumblers belonging to, **a**
- Tragedy, Greek, 8
- Training School of Y. M. C. A., 33
- Transmutation of percent position, 280
- Transmutation of Rank of Activities into Numerical Scores, 277, 280
- Procedures for, 276, 280
- Trial and error learning, 63
- Trial and success learning, 63
- Trials, number of for stunt and tumbling meet, 284
- Triple Forward Roll, Skaters' Position, 168
- Triple Jump Roll, 166
- Triple Roll, 165
- Troupe, tumbling. See Tumbling troupes.
- Tuck-IJp, 53, 204, 246

- Tumbe, 13
- Tumbian, 13
- Tumble
 - Original definition of, 12
 - Word, 12
- Tumbler
 - Italian, 21, 22
 - Ready made, 66
- Tumblers, 13
- Tumblers
 - Associated with jugglers, etc., 6, 7, 8, 10, 12, **a**, 15, 16, 24, 25
 - At Fairs, 24
 - Banded groups, 6, 23
 - Belonging to towns, **a**
 - Censure of, 12, **a**, 19, 20, 28, 30
 - Decorum of, 13, 20
 - Effect upon opera at non-appearance, 28
 - Favorite of royalty, 13, **a**, 19, 20, 22, 26
 - Gifts to, 13
 - In America, 28
 - In England, 12, **a**, 26, 28
 - In Egypt, 3, 9, 11
 - In fifteenth to eighteenth centuries, 19
 - In France, 15, 22
 - In Greece, 3, 6, 9, 11
 - In Middle Ages, 12
 - In -Rome, 7, 10
 - Influence on tumbling in American schools, 13
 - Italian, 20, 22, 23
 - Professional, 3, 32
 - Queen Elizabeth's, 20
 - Remuneration of, 13, 19
 - Separation from jugglers, 15
 - Skill of, 11, 13, 16, 20, 26
 - Status of, 3, 12, 13, **a**, 15, 16, 19, 22, 24, 25, 28, 41
 - Women, 1, 3, 4, 6, 8, 9, 11, 13, 15, 20
- Tumblester, 13
- Tumblide, 18
- Tumbling
 - Antiquity of, 1
 - Associated with character of Harlequin, 23
 - Contributions as physical activity, 42
 - Definition of, 1
 - Demonstrations, 297
 - Ordered program of, 26
 - Test of Motor Ability, 39
 - Test of Physical Achievement, 40
 - Test of Physical Efficiency, 40
 - Words for, 13
- Tumbling and
 - Dancing, 1, 3, 5, 6, 7, 8, 31
 - Entertainment world, 6
 - Juggling, 6, 23
 - Mimes, 7, 12
 - Private social occasions, 9
 - Public social occasions, 10, 24
 - Religion, 3, 4, 6, 12, H, 15, 16, 18, 19, 20, 28, 30

- Tumbling *and-Continued*
 The Theater, 6, 8, 23, 30
 Tumbling as physical education activity,
 42
 Tumbling as test for
 Motor ability, 39
 Physical achievement, 40
 Physical efficiency, 40
 Tumbling books, 33, 34, 36, 38, 39, 119,
 315, 316, 317
 Tumbling clubs, 48
 Tumbling Feats. See Feats.
 Tumbling for Amateurs, book, 34, 316
 Tumbling for girls, 40, 135
 Aims of, 135
 Tumbling For Students and Teachers,
 book, 119, 316
 Tumbling Golf, 244
 Tumbling in
 America, 28
 Ancient times, 1
 Art, 1, 2, 3, 4, 6, 11, 18
 Circuses, 10, 29, 30
 Colleges, 31, 33, 48
 Egypt, 1, 3, 4, 5, 6, 9, 11
 Elementary schools, 37, 47
 England, 12, 13, 14, 26, 28
 Fifteenth to eighteenth centuries, 19
 France, 15, 22
 Greece, 3, 6, 9, 11
 High schools, 37, 48
 Italy, 20, 22, 23
 Literature, 3, 9, 14, 16, 17, 21, 25
 Middle Ages, 12
 Rome, 7, 10
 Theater, 14, 28
 Turnvereines, 36
 Twentieth century, 37, 39
 Y. M. C. A., 36
 Tumbling Illustrated, book, 119, 316
 Tumbling of royalty, 22
 Tumbling, Pyramid Building and Stunts
 For Girls and Women, book, 39, 119,
 316
 Tumbling Reel, *gilme*, 248, 306
 Tumbling terms, organization of material
 according to, 116
 Tumbling Through The Ages, demonstra-
 tion, 311
 Tumbling troupes
 Italian, 20
 Queen Elizabeth's, 20
 Tumla, 13
 Tumle, 13
 Turnerbund, tumbling in, 36
 Turnvereines, tumbling in, 36
 Twisting
 Definition of, 115
 Classification of activities by, 115, 121
 Two-high act, 32
 Types of organization, 83
- U**
- Underhill, J., 25, 314
 Understanding by class and instructor,
 74
 Units
 In Class, 83
 Of Work, 80
 Ups and Downs, game, 250
 Use of stunt and tumbling material, 114
 Use of stunts and tumbling for testing,
 39
- V**
- Vanderbilt University, 33
 Variations of Forward Roll, 153
 Arms crossed, feet crossed, hands
 holding toes, 154
 Arms crossed, hands holding heels, 153
 Arms crossed, hands holding toes, 153
 Arms crossed, hands on knees, 154
 Arms folded behind back, 154
 Arms folded on chest, 154
 Courtesy, 155
 From rolled mat, 155
 Hands behind head, 154
 Hands clasped behind knees, 154
 Hands holding ankles, 153
 Hands holding heels, 153
 Hands holding knickers, 154
 Hands holding toes, 153
 Hands on hips, 154
 Hands on knees, 153
 Hands on shoulders, 154
 Humpty Dumpty, 155
 Roll, Clap hands, 155
 Roll, whistling, 155
 Sailor, 154
 Soldier, 155
 Tailor Fashion, 155
 Variety show, tumbling in, 30
 Vaudeville, tumbling in, 30
 Vaults
 Brittany, 17
 Champagne, 17
 French, 17
 Lorraine, 17
 Metz, 17
 Roman, 17
 Spanish, 17
 Verbal aids, 56
 Student participation in, 56
 Suggestions for, 56
 Verona, 18
 Visual aids, 54
 Demonstrations, 54
 Illustrations, 54
 Vulcan, god artist, 3
- W**
- Wagon Circus, 29, 38
 Wagon Shows, 29
 Waldorff, Myron, 33
 Walk
 Cat, 198
 Double, 208
 Duck, 51
 Dwarf, 51

- Walk-Oontinued*
 Spider, 199
 Swagger, 201
 Walrus, 199, 233, 288
- Walking
 Classification of activities by, 114, 120
 Definition of, 114
 Walking Chair, 262, 296
 Walking Chair Race, 237, 262
 Walking On Hands, 13, 17, 26
 Walrus Walk, 199, 233, 288
 Wand Pull-Up, 221
- Wandering entertainers
 At courts, 13, 14
 Decorum of, 13
 Early banded groups of, 6
 In America, 28
 In England, 12, 13, 19, 28
 In France, 24
 In Middle Ages, 12, 15
 Popularity of, 12, 19, 20, 22, 24, 25, 28, 30
- Washington, George, 29
- Wayfaring tradition, 12
- Wayman, Agnes, 40, 317
- Webster's Collegiate Dictionary, 115, 116, 317
- Weight as basis for selection of squad members, 84
- Westervelt, L., 314
- Wheel, Antwerp, 15
- Wheelbarrow, 51
- Whitney, Anne, 66, 319
- Williams, J. F., 37, 317
- Williams, J., Dambach, J. and Schwen-dener, N., 61, 317
- Winner of stunt and tumbling meets, 284
- Wixom's Circus, 38
- Women Acrobats, 8
- Women Mimes, 8
- Women Tumblers
 In Egypt, 1, 3, 4, 6, 8, 11
 In England, 12, 13
 In Greece, 8, 9, 10, 11
 In Knossus, 11
 In Middle Ages, 13, 15
 Influence of on theater, 8
 Italian, 20
- Women's Division of National Amateur Athletic Federation, 40
- Wonder Makers, 8, 10
- Wonders of Bodily Strength and Skill, book, 22
- Wood, T. D., 37
- Word picture, 56, 57, 58
- Words of approval by instructor, 64
- World War, 39
- Wycliffe Bible, 18
- Wynne, J. P., 62, 317
- Y
- Yaggy, L. W., 315
- Yale, 32
- Yankee showmen, 30
- Y. M. C. A.
 Boston, 32
 Cleveland, 32
 Des Moines, 33
 Gymnasias, 31
 New Castle, 36
 Omaha, 36
 Training School of, 33
- Z
- Zaccaro, 22