



MEN ARTISTIC GYMNASTICS: AN OVERVIEW

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ABSTRACT

The present qualitative status was explored with reference to Fédération Internationale de Gymnastique (FIG). According to FIG, "Men's Artistic Gymnastics channels masculine energy to develop power, strength and control. Mastery of the six apparatus requires the skillful combination of flips, balance, stretch, spin and landings" not only this by the participation in gymnastics, a gymnast, "Builds strength and prepares the body for the challenges in life, Enhances co-ordination and agility, allowing the body to move like lightning, Develops posture and confident body movement, including the ability to land safely, Challenges the mind and body to reach new goals, Develops healthy minds and bodies for now and later life". The term "artistic gymnastics" emerged in the early 1800s to distinguish free-flowing styles from techniques used in military training. Gymnastic competitions began to flourish in schools and athletic clubs across Europe and made a fitting return when the Olympic Games were revived in Athens in 1896. The present status is an attempt to introduce Men Artistic Gymnastics, the riskiest, technical yet fascinating sport during Olympics Games to the masses. Data were retrieved via Fédération Internationale de Gymnastique (FIG) in the Apparatus Norms, computerized literature searches on internet, hand searching selected journals, from books, articles which precise a clear background on what has been explored so far on the topic.

KEYWORDS: Gymnastics, Artistic Gymnastics, Federation International De Gymnastique (FIG), Floor Exercise, Pommel Horse, Roman Rings, Vaulting Table, Horizontal Bar, Parallel Bars.

INTRODUCTION

The formal definition of gymnastics, according to the Merriam Webster dictionary, is "a competitive sport in which individuals perform optional and prescribed acrobatic feats mostly on special apparatus in order to demonstrate strength, balance, and body control." There are five types of gymnastics but currently in the Olympics three types of gymnastics take part namely artistic gymnastics, rhythmic gymnastics, and trampoline. Aerobics and acrobatics are in line to be introduced in Olympics.

Artistic gymnastics is the most commonly-known type. Men compete, on equipment like the vault, floor, parallel bars, horizontal bars, pommel horse and rings. Whereas, women compete on the equipment like vault, floor, uneven bars and balancing beam.

Artistic gymnastics is one of the disciplines that have always an eye catching featured on the Olympic programme. In the early days of artistic gymnastics at the Games, participants often had a background in ballet, and would reach their peak in their 20s. Artistic gymnastics was introduced at the very first Olympic Games in 1896 in Athens, and has been present at every edition of the Games since then. At the beginning, it comprised disciplines that are difficult to qualify as "artistic", such as climbing and acrobatics.

The foundations of the Olympic gymnastics programme were laid at the 1924 Games in Paris, when the men's apparatus individual and team competitions appeared. In 1928, women were included in the

Amsterdam Games. It was not until 1952 that the women's programme was developed, with seven events, and then stabilized at six events for men and four events for women as from the 1960 Games in Rome.

The men's programme stabilized at eight events as of the Games of the XI Olympiad in Berlin in 1936. Women's gymnastics made its first appearance at the Games of the IX Olympiad in Amsterdam in 1928, with a team event. It was not staged in 1932 and reappeared in 1936. It was only in 1952 that the women's programme was extended to seven events. Since the Games of the XVII Olympiad in Rome in 1960, it has comprised six events.

Nadia Comaneci's and Nellie Kim's perfect scores of 10 at the 1976 Montreal Games, at the age of 14, heralded an era of younger champions, trained specifically in gymnastics from childhood, although gymnasts must now be 16 to compete in the Olympic Games. Nadia Comaneci's perfect score of 10 at the 1976 Montreal Games transformed the sport. By achieving the seemingly impossible seven times, the 14-year old Romanian raised standards to a new level.

Evolution in the number of events in various Olympics:

- 1896: 8 events (Men's);
- 1900: 1 event (Men's)
- 1904: 12 events (Men's)
- 1908: 2 events (Men's)
- 1912-1920: 4 events (Men's)
- 1924: 9 events (Men's)
- 1928: 8 events (7 Men's and 1 Women's)
- 1932: 11 events (Men's)
- 1936-1948: 9 events (8 Men's and 1 Women's)
- 1952-1956: 15 events (8 Men's and 7 Women's)
- 1960-2016: 14 events (8 Men's and 6 Women's)

This discipline was mainly dominated by the Soviet Union from 1952 onwards, following the creation of the Russian Gymnastics Federation in 1883. At the 2008 Games in Beijing, it was the Republic of China's turn to win the most gold medals.

Artistic gymnastics is a discipline of gymnastics where gymnasts perform short routines (ranging from approximately 30 to 90 seconds) on different apparatus, with less time for vaulting (see lists below). The sport is governed by the Federation Internationale de Gymnastique (FIG), which designs the *Code of Points* and regulates all aspects of international elite competition. Within individual countries, gymnastics is regulated by national federations, such as Gymnastics Federation of India (GFI)

Statement of the Problem

An Introduction to Men Artistic Gymnastics

Objective of Study

Understanding of Men Artistic Gymnastics

Delimitation

Study is delimited to introduction of men artistic gymnastics only

Study is delimited to various apparatus used for men artistic gymnastics only

Significance of the study

To raise awareness among the masses about the men artistic gymnastics

Data Collection

Data were retrieved via Fédération Internationale de Gymnastique (FIG) in the Apparatus Norms, computerized literature searches on internet, review of reference lists, hand searching selected journals, and expert review of our reference list, from books, articles, conference proceedings, dissertation and other important sources relevant to the current study, which precise a clear background on what has been explored so far on the topic.

Men's Artistic Gymnastics (MAG)

The competition program of men's artistic gymnastics consists of six routines namely Floor Exercises, Pommel Horse, Roman Rings, Vault, Parallel Bars and Horizontal Bar. Each event requires high levels of power and control. The vault, high bar, still rings and parallel bars showcase the male gymnast's strength as he manages to perform swinging, twisting and flipping movements while maintaining balance. The floor exercise and pommel horse highlight precision, coordination, balance and control.

1. FLOOR EXERCISES

In gymnastics, the floor refers to a specially prepared exercise surface, which is considered an apparatus. It is used by both male and female gymnastics. The event in gymnastics performed on floor is called floor exercise. The English abbreviation for the event in gymnastics scoring is Floor exercise (FX)

A spring floor made of a rubber foam and plywood combination which make the floor less bouncy, soften the impact of landings and enable the gymnast to gain height when tumbling. Floors have clearly designated perimeters to be performed on a 12x12-meter mat and out of bounds" area is always indicated by a border of white floor tape or a differently colored mat.



Men's routines are characterized by a sequence of linked elements that demonstrate simultaneously strength, flexibility, and balance. Each exercise consists of movements which combine a number of elements, such as acrobatics, alternating between powerful tumbling series, somersaults, handstands, balances, rotations and rotations. The execution and the configuration of the exercise must express a personal flair. The whole surface of the floor must be used.

A floor exercise for men is made up of mostly acrobatic elements, combined with other gymnastic elements of strength and balance, flexibility, and handstands. The routine must be choreographed for form a harmonious rhythmic exercise using the whole floor area. The whole routine may last no longer than 70 seconds.

Unlike men, women always perform routines to music. The routine is choreographed in advance, and is composed of acrobatic and dance elements. This event, above all others, allows the gymnast to express her personality through her dance and musical style. The moves that are choreographed in the routine must be precise, in sync with the music and entertaining. The music used for the routine is also the choice of the gymnast and her coaches. It may be of any known musical style and played with any instrument(s), however, it may not include spoken words or sung lyrics of any kind. Vocalization is allowed if the voice is purely done as an instrument. It is the responsibility of the coach to bring the music to every competition on CD.



Scores for WAG as well as MAG is concerned the scores are based on difficulty, artistry, demonstration of required elements and overall performance quality. Deductions are taken for poor form and execution, lack of required elements,

and falls. The gymnast is expected to use the entire floor area for her routine, and to tumble from one corner of the mat to the other. Steps outside the designated perimeters of the floor incur deductions. The gymnast will also incur a deduction if there are lyrics in the music.

As with other gymnastic events, scores are based on difficulty, form, and overall performance quality. Deductions are taken for lack of flexibility, not using the whole floor area, pausing before tumbling lines, and using the same diagonal more than twice. Handstand elements must display control and show the gymnast's intent clearly

At the international elite level of competition, the composition of the routine is decided by the gymnast and her/his coach but should contain at least one element from all element groups:

- I. Non-acrobatic elements
- II. Acrobatic elements forward
- III. Acrobatic elements backwards
- IV. Acrobatic elements sideways, backward jumps with $\frac{1}{2}$ turn to salto forward, and backwards jumps with a quarter turn and a side flip (side sami)
- V. The dismount can come from any element group other than group I.

DIMENSIONS:

Measurements of the apparatus are published by the Fédération Internationale de Gymnastique (FIG) in the *Apparatus Norms* brochure. The dimensions are the same for male and female competitors.

Performance area: 1,200 Centimeters (39 ft) x 1,200 Centimeters (39 ft) \pm 3 Centimeters (1.2 in)

Diagonals: 1,697 Centimeters (55.68 ft) \pm 5 Centimeters (2.0 in)

Border: 100 Centimeters (3.3 ft)

Safety zone: 200 Centimeters (6.6 ft)

1.1 Gym floor covers:

It can either be a carpet-based protection system or is a large plastic tarp, similar to a painter's tarp, usually divided into equal sections 6 to 10 feet (1.8 to 3.0 m) wide each to cover up the entire gym floor to prevent injuries due slips and falls.

Modern gym floor covers are manufactured with the variety of colors, anti-slip surfaces, and weights ranging from 6 to 32 ounces (170 to 910 g) per square yard (0.84 m²). The following technical characteristics are used to describe the covers: filament size, weave count, total weight, core weight, tear strength, tensile strength, adhesion, coefficient of friction, slip resistance, hydrostatic resistance, fire resistance and others.

2. Pommel Horse

The oldest description of gymnastics on an artificial horse is over 600 years old. It was written by a Rhenus Vegetius, who, in his four volume "Overview of the Roman Army", describes soldiers using a wooden horse for practice. In the 17th century a drill-instructor developed the art of equestrian acrobatics from this description. In the early 19th century the wooden pommels were replaced by a biegele, and the wooden horse developed into a schwingel' covered in leather. Today's exciting pommel horse routines with their fascinating dynamics are hardly reminiscent of the early routines on this piece of apparatus.

Historically, the pommel horse was developed centuries ago as an artificial horse used by soldiers to practice mounting and dismounting. Even Alexander the Great is believed to have used too. Alexander the Great and his Macedonians are said to have practiced mounting and dismounting on a wooden horse. In the fourth century Vegetius describes Roman soldiers practicing on a wooden horse in his "Overview of the Roman Army".

In the early 19th century, when Jahn, regarded as the father of gymnastics, was alive, there were three different kinds of horses on the Hasenheide in Berlin: One very close to reality with a head and





and a leathercover, modern pommel horses have a metal body covered with foam rubber and leather, with plastic handles (or pommels).



a tail, one made of leather without a tail but with an ascending neck and the wooden "Schwingel" (fescue-grass) a word which F.L. Jahn, who detested the use of foreign words in German, had created to avoid the originally French word of *Voltegiere*. The latter developed into the Olympic apparatus of pommel horse

Traditionally, it is used only by Men Artistic Gymnasts. Originally it is made of a metal frame with a wooden body



At the beginning of the 20th century gymnastics horses had to fulfil the following

requirements (quoted from *Jahrbuch der Turnkunst 1907*): "The length of the horse should be 190cm." Required height is cited as between 110 and 170cm. Height of the body 40cm, width on top 40cm and below 37cm. Neck and end are equal since the saddle, i.e. the distance between the pommels, is 44 to 45cm, leaving 72cm each for neck and end. The pommels are 11-12 cms high and 30 to 32cm thick. Horses with longer necks (asymmetric) where the neck was bent upwards in slightly crooked way, were also common. Around 1920 a completely symmetric horse

existed (R. Gausch manual), however, head and rump had different lengths. The top of the horse remains round (this will not change for a long time), and shows no signs of allowing wandering movements that would later become popular in the world of gymnastics. Another feature making this development impossible were the round pommels, which hardly allowed for the support of both hands as is typical of the wandering movements. A 1926 model of the pommel horse had a more sleek look to the torso and the lower part lightly curves upwards. This type of horse was still used at the 1936 Berlin Olympics. It was only 180cm long. Gymnasts already competed swinging elements on the neck as well as the rump.

The Americans brought a version of the horse to the 1948 Olympics that was only 160cm long and was built completely symmetrically. As a result, they were able to show totally new combinations and great virtuosity in their leg circles on the end of the horse.

At a meeting in Venice, Italy, in 1955 the International Gymnastics Federation's apparatus committee discussed the horse with a length of only 160cm, which was already being widely used in Switzerland, and a year later it was finally officially certified at a meeting in Boppard, Germany. From now on, one no longer spoke of neck and rump, but of two equal "ends". Pommel horse artists such as Grant Schaginjan performed with incredible virtuosity on this horse at the 1954 world championships. Their technique had a major influence on the further development of the apparatus.

The development of the pommels largely depended on the type of use. As long as the horse was used mainly for jumping and equestrian acrobatics were merely a dry run for riding, the pommels didn't have any special function. But once gymnasts began swinging in the support position – first with one leg, and in the middle of the 19th century the two-legged swing became popular- this influenced the form of the pommels. Swiss gymnastics was particularly progressive during this period and in the 1880s the pommel horse spread into German gym clubs as well. The standard pommel was hollow, mostly made from iron in the beginning, but in later years wood was also used. Some of the pommels were covered in leather. The pommels of the horse used at the 1936 Olympics were noticeably flatter in comparison to the earlier ones.

This trend continued in the mid 1950s. Pommel horse artists forced the further development of the apparatus through new elements. Examples are Yu Lifeng of China and his circles on one pommel at the 1962 world championships in Prague or pommel horse specialist Russel Mills, who showed circles in cross support on one pommel in 1964. Then, of course, Miroslav Cerar, Zoltan Magya. The call for pommels that allowed for a fleeting double hold/grip at an equal height of the pommels became louder and louder. In 1974 the pommels were lengthened from 280 to 310mm. At the 1975 Gymnastrada in Berlin a revolutionary new pommel was introduced – machine manufactured, it was made entirely from plastic. Another novelty was the distance between the pommels (400 to 450mm), which was adjustable without any steps. The apparatus we see in competitions today, for instance the type manufactured by Janssen &Fritsen, Official Suppliers of the 2000 World Championships in Gent, is a top level apparatus which is certified by the FIG. The durable rump is covered in high quality leather and foam rubber. Its pommels are made entirely of wood, fibre glass or plastic and chains anchor it to the ground. Height can be adjusted in steps of 5 cm between 110 and 150 cm.



Different formats of mushrooms

DIMENSIONS

Measurements of the apparatus are published by the Federation International De Gymnastique (FIG) in the *Apparatus Norms* brochure.

- Height from top surface to floor : 115 Centimeters (3.77 ft) ± 1 Centimeters (0.39 in)
- Length at top : 160 Centimeters (5.2 ft) ± 1 Centimeters (0.39 in)
- Length at bottom : 155 Centimeters (5.09 ft) ± 1 Centimeters (0.39 in)
- Width at top : 35 Centimeters (14 in) ± 1 Centimeters (0.39 in)
- Width at bottom : 30 Centimeters (12 in) ± 1 Centimeters (0.39 in)
- Height of the pommels : 12 Centimeters (4.7 in) ± 0.5 Centimeters (0.20 in)
- Distance between the pommels : 40 Centimeters (16 in) – 45 Centimeters (18 in) (adjustable)

1.15 meters high and has two handles (12 Centimeters pommels) attached to the apparatus body, set 40 to 45 cm apart. The routines make use of the full surface of the apparatus and present a succession of circular and pendulum-type swings, leg circles, scissors movements, and handstands.



Routines mostly involves circles of the leg together and pendulous, single leg skills are generally found in the form of scissors, an element often done on the pommels. Double leg work however, is the main staple of this event. The gymnast swings both legs in a circular motion (clockwise or counterclockwise depending on preference) and performs such skills on all parts of the apparatus. To make the exercise more challenging, gymnasts will often include variations on a typical circling skill by turning (moore's and spindles) or by straddling their legs (Flares). Routines end when the gymnast performs a dismount, either by swinging his body over the horse, or landing after a handstand.

Pommel horse is considered one of the more difficult men's events. While it is well noted that all events require a certain build of muscle and technique, pommel horse tends to favor technique over muscle. This is because horse routines are done from the shoulders in a leaning motion and that no moves need to be held unlike other events. Therefore, stress induced in one's arms is reduced meaning less muscle is needed in this event than events like still rings or parallel bars.

SCORING AND RULES

As with all events in the Fédération Internationale de Gymnastique (FIG) guidelines, form is crucial to any successful routine. For pommel horse, form consists of keeping one's feet pointed and legs straight during the entire routine. The gymnast should keep his legs together during all elements, exceptions being scissors, single legged elements, and flairs. Gymnasts are also deducted for not using all three sections of the horse and pausing or stopping on the apparatus. Deductions also apply for brushing and hitting the apparatus.

3. ROMAN RINGS

The rings, also known as steady rings or still rings (in contrast to flying rings), is an artistic gymnastics apparatus and the event that uses it. It is traditionally used only by men's gymnasts, due to its extreme upper-body strength requirements. Gymnasts typically wear ring grips while performing on the rings.



An exercise on rings consists of swing, strength and hold elements. Generally, gymnasts are required to fulfill various requirements including a swing to held handstand, a static strength hold, and an aerial dismount. More experienced gymnasts will often perform more than one strength element, sometimes swinging into hold positions or consecutively performing different holds.

One of the most widely recognized skills performed on the rings is the *Iron Cross*, which is executed by extending both arms straight out from the sides of the body while suspended mid air for at least two seconds. Other common strength moves include the inverted cross (i.e., vertically inverted Iron Cross) and the Maltese cross, in which the gymnast holds his body parallel to the ground at ring height with arms extended laterally. Swing elements include giant swings from handstand to handstand, similar to giants performed on the horizontal bar. Elements on the rings are regulated by the Code of Points. The apparatus consists of two rings that hang freely from a rigid metal frame. Each ring is supported by a strap, which in turn connects to a steel cable that is suspended from the metal frame. The gymnast, who grips one ring with each hand, must control the movement of the rings.

Dimensions

The measurements of the standard apparatus are specified by Fédération Internationale de Gymnastique (FIG) in its *Apparatus Norms* document:

1. Inner diameter : 18 Centimeters (7.1 in) \pm 0.1 Centimeters (0.039 in)
2. Distance from point of attachment to lower inner side of the rings : 300 Centimeters (9.8 ft) \pm 1 Centimeters (0.39 in)
3. Distance between two points of attachment : 50 Centimeters (1.6 ft) \pm 0.5 Centimeters (0.20 in)

Routine:

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International level routines

A rings routine should contain at least one element from all element groups:

- I. Kip and swing elements (including to L-sit)
- II. Swings to handstand
- III. Swings to strength hold elements (not L-sits)
- IV. Strength elements and hold elements
- V. Dismounts

A Gymnast hang from a structure at 2.75 meters above the ground. Ring routines should include swings and handstands to emphasize muscle strength. The program must end with an acrobatic dismount.

Scoring and Rules:

Gymnasts will take deductions for form similar to other apparatus. On rings gymnasts will also take deductions for having bent arms in strength elements, or using the straps/cables to support or balance themselves. There are also deductions for excessive swinging of the cables during the routine.

4. Vaulting Table

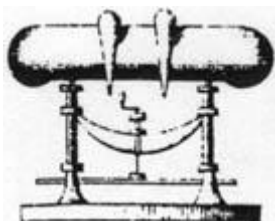
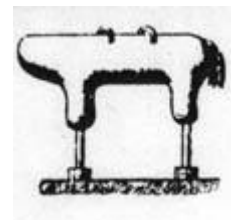
The **vaulting** table requires clean and powerful movements that combine height and length with one or more rotations, ending with a well-controlled landing. Even Alexander the Great and his Macedonians are said to have practised mounting and dismounting on a wooden horse. In the 4th century Vegetius describes Roman soldiers using wooden horses for practice in his "Overview of the Roman Army". Somebody must have remembered Vegetius' work in the 17th century and expanded what was originally part of military training into a sporting activity. Equestrian acrobatics was an important part of the education at academies for knights and fencing schools up until the late 18th century, and a great number of manuals date from this time. Historically, there were six versions of the vaulting table.

Models of the pommel horse from various eras:



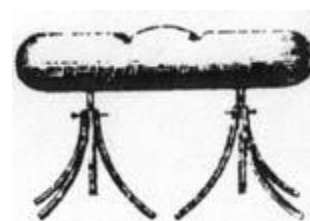
Vieth model 1795, Height was already adjustable

Guts Muths model around 1800, with iron *biegels*. In the early 19th century, when Jahn, regarded as the father of gymnastics, was alive, there were three different kinds of horses on the Hasenheide in Berlin: One very close to reality with a head and a tail, one made of leather without a tail but with an ascending neck and the wooden *schwingel* a word which F.L. Jahn, who detested the use of foreign words in German, had created to avoid the originally French word of *Voltegiere*. The latter developed into the Olympic apparatus of pommel horse



Jaeger model around 1860, wooden horse with leather cover

Belgian model, with odd feet, fully symmetric



Gymnastic horse 1811

Berlin native Carl Schuhmann, the most successful German Olympian in Athens 1896, vaulted over that kind of apparatus. From then on, this horse, which was never meant or constructed for vaulting over, stood at the end of the 20m runway like a dangerous and pointed bolt. Moreover, the existing vault for men had a width of only 35 cms, far too narrow for the gymnasts'

broad shoulders.

Gymnastics saw many dangerous falls and collisions. Julissa D'anne Gomez (November 4, 1972 – August 8, 1991) was an American gymnast whose rapid rise through the ranks of elite gymnastics in the mid-1980s was cut short by a vaulting accident in 1988 that left her a quadriplegic. She eventually died from her injury. When Trent Dimas, who later went on to take the gold medal on high bar in Barcelona, seriously injured himself at the 1991 Indianapolis World Championships. Their injuries sparked major changes to the vaulting discipline of artistic gymnastics with the goal of preventing such serious injuries.

Former East German head coach Dieter Hofmann first brought up this problem in 1983 and has since then addressed the topic in many lectures and articles, especially since the fact that the form of the vaulting horse was unsuitable to the male anatomy became even more evident after the introduction of the Yurchenko type vaults. Then FIG Vice President Siegfried Fischer (Brazil) called for the creation of a new vault, which could be used for both men and women

Hofmann worked on the creation of Dutch apparatus manufacturers, Janssen and Fritsen's Pegases, as a consultant. The name is derived from the legend of the flying horse "Pegasus" in Greek mythology and is meant to symbolize the vault into the next millennium. Austrian sculptor, artist and coach Helmut Hoedelmoser from Vienna created a wooden model in the early nineties that Esslingen based apparatus manufacturers SPIETH used to build its Ergojet which they presented to the gymnastics world during the 1997 Lausanne World Championships.



On January 26th 2001, FIG had officially certified Janssen and Fritsen and SPIETH/Germany's "Pegases", "Ergojet", "Tongue" as an official apparatus to be used in gymnastics competitions. The new apparatus is more stable, wider, and longer than the older vaulting horse—approx. 1 m in length and 1 m in width, gives gymnasts a larger blocking surface, and is therefore safer than the old vaulting horse. With the addition of this new and safer apparatus, gymnasts are attempting more difficult and dangerous vaults.

The vault is an event as well as the primary piece of equipment used in that event. Unlike most of the gymnastic events employing apparatuses, the vault is common to both men's and women's competition, with little height difference between the two categories.

A gymnast sprints down a runway, which is a maximum of 25 meters in length, before leaping onto a spring board. Harnessing the explosive energy of the spring, the gymnast directs his or her body hands-first towards the vault. Body position is maintained while "popping" (blocking using only a shoulder movement) the vaulting platform. The gymnast then rotates his or her body so as to land in a stick standing position on the far side of the vault. In advanced gymnastics, multiple twists and somersaults may be added before landing.

Successful vaults depend on the speed of the run, the length of the hurdle, the power the gymnast generates from the legs and shoulder girdle, the kinesthetic awareness in the air, and the speed of rotation in the case of more difficult and complex vaults.

Measurements:

Approach run, 25 meters; table height, 135 cm.

5. PARALLEL BARS

The parallel bars (in German Barren) were invented by Friedrich Ludwig Jahn in Berlin. In 1819 the first transportable parallel bars were described. In 1856 in Germany Hermann Otto Kluge used tubes to make the parallel bars and the horizontal bar adjustable. He used them in his gym. In Tolstoy's *Anna Karenina*, published between 1873-1877, their use for exercise is described.



Parallel Bars is an apparatus used by the men gymnasts. The apparatus consists of 2 bars elevated above the floor by metal supported frame. The bars are made of compressed wood or fiber glass with metal rod inside. The vertical members of the supporting framework are adjustable so the height of the bars above the floor and distance between the bars can be set optimally for each gymnast's own requirements.

Routine

A routine performed on the parallel bars must include various elements that depend on the gymnast's competitive level. A typical performance will involve swinging skills in a support position (on the hands), a hanging position, and an upper arm position (resting on the inner bicep). Also, parallel bar routines often feature a strength or static hold skill. Each routine ends with a dismount from either the ends of the bars or the side of the apparatus.

While routines they wear leather grips to save palms from frictional injuries. The height of **parallel bars**, 1.95 meters in height and 3.50 meters in length, require a combination of swinging movements, swings, and handstands demanding strength. The gymnast must travel the full length of the apparatus and work on the top of the bars as well as below them.

Scoring

Deductions are taken for form and exactness of elements performed. There are specific deductions for adjusting hand position in handstand and not controlling swing elements; swing type elements should momentarily show handstand.

6. HORIZONTAL BAR

The horizontal bar is 2.40 m. wide and 2.75 meters high. In this routine, the gymnast performs continuous and clean swinging movements and must not touch the bar with his body. He is required to demonstrate changes of grip, swinging movements both forward and backward, with releases and regrips of the bar. Dismounts are an important part of the total routine and are usually acrobatic and spectacular.

CONCLUSION

Men artistic gymnastics is the most technical and risky gymnastics. This spectacular sport is one of the most popular events at the Summer Olympics, held every four years. Gymnastics teams qualify for the Olympics based on their performance at the World Championships the year before the Games. Nations that do not qualify to send a full team may qualify to send one or two individual gymnasts. Understanding of such enormous sport makes it mostfascinating sport.

REFERENCES

- "A History of Gymnastics: From Ancient Greece to Modern Times scholastic", www.scholastic.com. Retrieved 30 May 2017.
- "Apparatus Norms" Fédération Internationale de Gymnastique (FIG) Technical Regulation Men Code of Points (FIG)
- "Within the International Federations" *Olympic Review*(155): 520. September 1980. Archived from the original, on 24 May 2006. Retrieved 11 April 2006