April 22, 1958 M. K. IVOR 2,831,686

GYMNASTIC APPARATUS

Filed Sept. 12, 1955

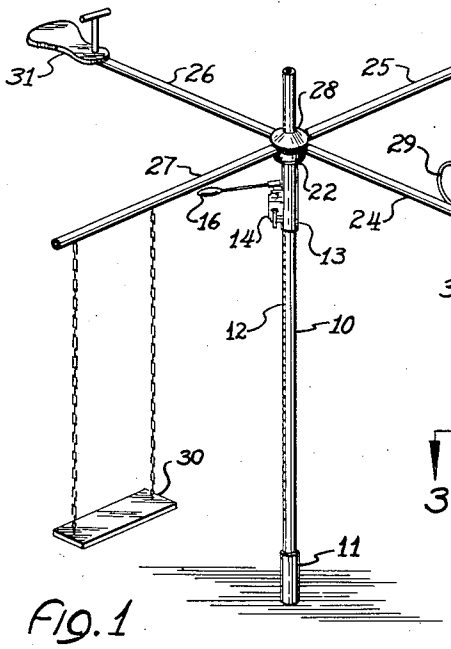


Fig. 1

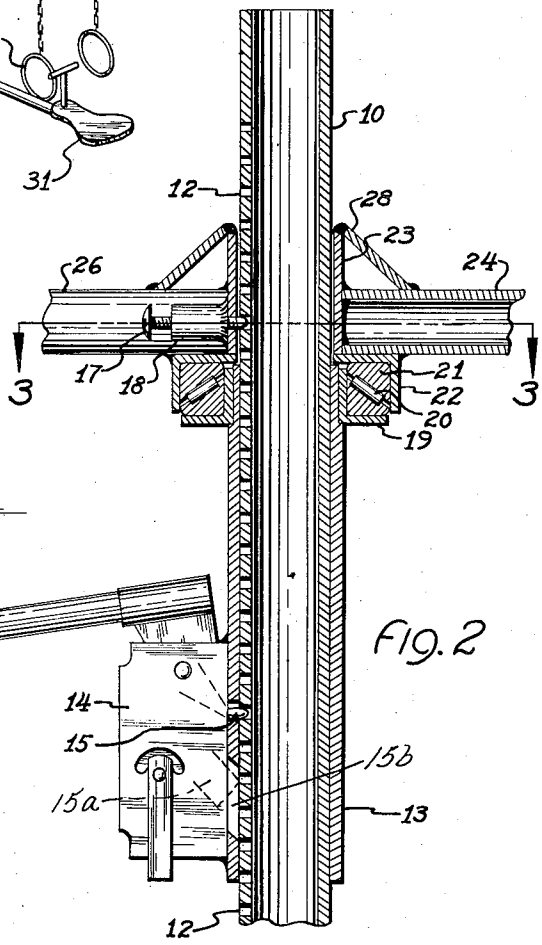


Fig. 2

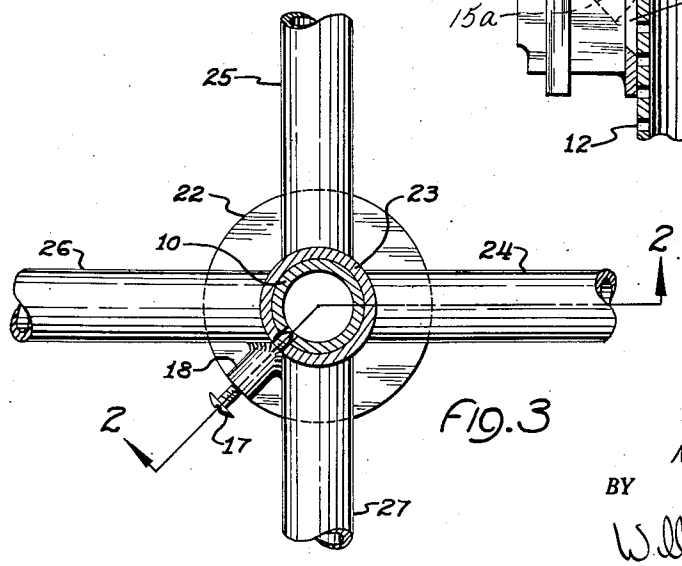


Fig. 3

INVENTOR.
MICHAEL K. IVOR
BY
Willard S. Grove
ATTORNEY.

United States Patent Office 2,831,686 Patented Apr. 22, 1958

2,831,686

GYMNASTIC APPARATUS

Michael K. Ivor, Phoenix, Ariz.

Application September 12, 1955, Serial No. 533,635

2 Claims. (Cl. 272—33)

This invention pertains to improvements in gymnastic apparatus and has for its particular object that of providing a device which is readily adapted to a large variety of gymnastic performances and particularly an apparatus applicable to child's play toy.

Another significant object of this invention is to provide a common main central post upon which the apparatus may be placed and elevated to desired operative positions and also rotatable in merry-go-round fashion for other forms of gymnastic performances.

Still another object of this invention is to provide a gymnastic apparatus of built-up structure which may be rearranged and reorganized to perform a wide variety of services for child's play and gymnasium performances.

Still another object of this invention is to provide an improved gymnastic apparatus comprising a main central post having a hub structure which may be vertically raised or lowered to desired fixed positions thereon and which also has further means rotatable around a vertical axis of said post having arms for carrying various forms of swings, rings, merry-go-round seats or the like.

It is also an object of this invention to provide in conjunction with the last mentioned object power means, if desired, to continuously rotate the main upper frame structure in merry-go-round fashion.

Further features and advantages of this invention will appear from a detailed description of the drawings in which:

Fig. 1 is a general perspective view of the gymnastic apparatus incorporating the features of this invention.

Fig. 2 is an enlarged sectional view fragmentary in nature indicated by the line 2—2 in Fig. 1.

Fig. 3 is a section on the line 3—3 of Fig. 2.

This invention comprises a main post **10** suitably supported in a socket **11** fixed in the ground surface. The main post extends up vertically and is provided with a series of detent holes or notches **12** formed preferably its entire length from bottom to top. A sleeve **13** nicely slidably and rotatably fits around the periphery of the main post **10** and has fixed on it a jack structure **14** of usual character such as shown in Patents 2,265,769 and 2,397,965 having a latch pin **15** and lifting plunger **15***a* in slot **15***b* operated by the jack handle **16** for raising and lowering the sleeve **13** on the main post **10** by inner-engagement of the latch pin **15** of the jack member **14** with the detent holes or notches **12**. An index pin or screw **17** is suitably threaded in the boss **18** formed integral with the sleeve **23** and adapted to be engaged into or disengaged from any one of the detent holes **12** in the main post **10** so that the sleeve **23** may be rigidly locked against rotation or vertical movement if desired when proper raised or lowered position is effected by the jack structure **14**.

Fixed on the upper end of the sleeve **13** is the inner cup **19** of an anti-friction roller bearing **20** having an outer race **21** supporting a cup **22** to which is fixed the sleeve **23** which is rotatably mounted about the main post **10** with appropriate clearance provided so that the bearing **20** provides the journal for the sleeve **23**. Integrally secured to the cup **22** and sleeve **23** are a series of radially disposed arms comprising the pipes **24**, **25**, **26** and **27**, each of which are also secured at their upper portions to the sleeve **23** by the integrally secured disc **28**.

Various forms of gymnastic apparatus may be readily applied to the radially disposed pipes **24**, **25**, **26** and **27** such as the rings **29** on the pipe **25**, the swing **30** on the pipe **27** or the merry-go-round seats secured to the pipes **24** and **26** as indicated at **31**. Many other forms of gymnastic appliances may be connected to the arms as desired.

Thus, by this apparatus the device may readily be raised or lowered for merry-go-round or swing and ring operation and may be quickly adjusted for rotation if desired by the mere application of the index pin or screw **17** in the boss **18** of the sleeve **23**. Thus, the device is universally adjustable for a wide variety functions of gymnastic play especially adapted to child use such as a play ground or in the backyard.

While the apparatus herein disclosed and described constitutes a preferred form of the invention, it is also to be understood that the apparatus is capable of mechanical alteration without departing from the spirit of the invention and that such mechanical arrangement and commercial adaptation as fall within the scope of the appendent claims are intended to be included herein.

Having thus fully set forth and described this invention what is claimed and desired to be obtained by United States Letters Patent is:

1. A gymnastic apparatus comprising a ground support socket, a main post vertically supported in said socket, a series of spaced detent holes formed in vertical alignment longitudinally of said main post, a first sleeve slidingly and rotatably carried on the outer periphery of said main post, a jack member fixed on the outside of said first sleeve including an actuable latch pin successively engageable in said detent holes progressively up and down said main post for raising and lowering said first sleeve and locking said first sleeve against rotation on said main post, a radially outwardly extending handle for actuating said latch pin as described, a second sleeve rotatably supported on said main post and rotatively supported against downward movement on the upper end of said first sleeve so that said second sleeve is supported in vertical alignment on said main post and supported rotatively against down thrust on said first sleeve, circumferentially spaced radially disposed support arms rigidly fixed to said second sleeve, and gymnastic apparatus mounted on the outer ends of said support arms.

2. In a gymnastic apparatus as set forth in claim 1, an index pin radially movably mounted on said second sleeve adapted to be moved radially inwardly into one of said detent holes to lock said second sleeve against vertical and rotary movement relative to said main post.

References Cited in the file of this patent

UNITED STATES PATENTS

1,669,063	Mills	May 8, 1928
1,771,965	Mills	July 29, 1930