A baseball and softball batting aid that measures the power and success of a batter’s swing for various locations that a ball can be batted. The mechanism consists of a primary rod with a rotating propeller device affixed to one end. The primary rod is hand-held by one person who steadies or guides a ball-like end of the propeller into a hittable location for a batter. The batter swings and hits the ball causing the propeller to spin. The initial spin rate of the propeller (Revolutions Per Minute or RPM) is a factor of the bat impact, and the rate and ball distance is measured and displayed with an electronic device. The player and the assistant can quickly work together on achieving more powerful swings for various pitches since the ball does not have to be retrieved, the mechanism can be positioned into many hit locations, and accurate results are immediately known.
Hands move out for high and outside, low for low and inside.

Front foot steps towards right field on outside pitch, towards left field on inside pitch.

Drawing 2
BATTING AID TO MEASURE SWING POWER

CROSS-REFERENCE TO RELATED APPLICATIONS


STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

[0002] Not applicable.

REFERENCE TO SEQUENCE LISTING, A TABLE, OR A COMPUTER PROGRAM LISTING
COMPACT DISK APPENDIX

[0003] Not applicable.

BACKGROUND OF THE INVENTION

[0004] The specification is directed to a mechanism that helps teach baseball and softball hitters how to optimize their swing for increased ball impact.

[0005] When a baseball or softball pitcher throws a ball to a batter, the position where the bat must be in order to make contact with the ball is directly related to the location of the pitched ball as it nears the batter’s reach. Typically the pitch locations of the ball are referred to as high, low, inside, outside and down-the-middle pitches. These locations are displayed in Item 1 of Drawing 1.

[0006] A batter typically performs standard body movements during the swing in order to hit the ball. Typical body movements are eye focus, foot shift as shown in Item 3 of Drawing 2, hands and arms moving the bat (Item 4 in Drawing 2), and body weight shifting from the back foot to the front foot, pointed out in Items 1 and 2 of Drawing 2.

[0007] In order for a batter to hit the ball with optimal velocity when the ball is pitched in various locations, the batter needs to adjust how he or she performs the body movements depending on the pitch location. The adjustments enable the batter to provide optimal muscle power and most impact to the ball at different pitch locations. For example, a ball that is pitched to a batter at a high and outside location requires the batter’s front foot to shift forward towards the right side of the playing field and the hands and arms to adjust upward towards the ball in order to have the best opportunity for maximum impact of the bat to the ball. Conversely, the batter should step forward towards the left side of the field and move the hands and arms downward towards the ball if the pitched ball is at a low and inside location in order to maximize impact. Example body movements for ball impact are shown in Items 3 and 4 of FIG. 2. If the batter does not perform proper body movements during the swing, there is a less chance that the batter will hit the ball with maximum impact and therefore the ball will travel less distance.

[0008] Due to the above facts, batters and coaches search for enhanced aids to quickly help batters improve their swings to increase hitting power for various locations that a ball can be pitched.

BRIEF SUMMARY OF THE INVENTION

[0009] A batting aid that measures the power and success of a baseball or softball player’s swing for various locations that a ball can be pitched.
positioning of the ball in various hit locations, and also decreases the set-up time enabling consecutive, repetitive swings.

[0014] An electronic part (Item 7 in Drawing 3) is attached to the main rod (Item 1 in Drawing 3) that measures the amount of revolutions per minute (RPM) of the propeller object (item 2) and displays the RPM value in an LED or LCD display. The electronic instrument is typically called a tachometer or revolution counter. The RPM value can also be converted and displayed by the electronic instrument to the approximate distance the ball would have actually traveled.

[0015] The mechanism specified aids a batter to quickly perform successive batting swings for different locations that a ball could be pitched. The batter practices optimal body movements during each swing in order to provide the most impact to the ball. After the ball is struck, the mechanism’s propeller speed revolves in direct proportion to the impact of the ball. The batter and the assistant, who could be a coach, friend or parent, immediately receive the success of the impact, and hence swing, as result of the propeller speed.

[0016] Children who are learning the sport may get bored quickly with standard batting practice aids. The spinning of the mechanism’s propeller provides entertainment value and can enable a child to practice longer.

[0017] Moreover, the speed or ball distance is displayed with an electronic instrument to more accurately gauge the success of the swing. Since the propeller object can be stopped and set up quickly after a previous hit, the assistant can help teach the batter proper body positions and swing movements for maximum impact over several repetitions in a short amount of time.

[0018] Batters typically desire to perform consecutive swings as fast as possible in order to repetitively hone their proper body movement for a specific pitch location. Present batting aids such as a batting tee consisting of a stationary tee and real ball that is hit are cumbersome to adjust for different pitch locations and time consuming to retrieve the ball after a hit.

[0019] Batting aids that comprise of a ball tethered to a rope and pole do not allow the batter to make swings as fast as possible because the batter must wait for the ball to stop moving after a previous hit.

[0020] Other batting aids do not have a propeller rotation effect that show the batter immediate impact results and progress. Aids that contain balls tethered to a rope or directly affixed to a hand-held pole do not exhibit extended propeller-like spin, if any spin at all.

[0021] Some batting aids can be used by a single batter. Although this is beneficial with a single person, the most optimal teaching process is to have a second person studying and instructing during the process.

[0022] Present batting aid mechanisms do not have a very accurate measurement of the impact of the hit ball. The mechanism in this application provides both a physical measurement via the propeller spin, and a calculated measurement shown by the LED or LCD of the electronic attachment.

1. A revolving propeller-like object (Item 2 in Drawing 3) affixed to the end of a hand-held rod (Item 1 in Drawing 3) in combination with an electronic device (Item 7 in Drawing 3) that measures the revolution speed of the propeller-like object when used as a baseball or softball batting aid.

2. The use of a rigid propeller and rod structure (displayed in Drawing 3) used as a baseball or softball batting aid, such that after one end of the propeller object is struck with a baseball or softball bat, the propeller object revolves at a speed that is proportional to the strike.

3. A baseball or softball batting aid consisting of a propeller-like part attached to a hand-held rod (the complete object displayed in Drawing 3), with the propeller-like object containing one spherically-shaped end (Item 2 in Drawing 3) weighing slightly heavier than a fan-shaped second end (Item 5 in Drawing 3).

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