A simulated hockey goalie is suspended from a threaded collar or a feed screw that rotates first in one direction and then the other to move the simulated hockey goalie across the mouth of a hockey goal from one side to the other. A continuous belt beneath the goal and the goalie that forms part of the surface upon which a puck may slide transfers expended pucks in and around the goal into a puck receiving receptacle.

3 Claims, 1 Drawing Figure
SIMULATED HOCKEY GOALIE

BACKGROUND OF THE INVENTION

The present invention relates in general to apparatus for playing or practicing hockey and more particularly concerns novel apparatus that challenges a player to shoot a puck into a simulated hockey goal protected by a simulated goalie moving back and forth across the mouth of the goal to present a challenge to the player and sharpen his skills while entertaining him.

It is an important object of this invention to provide apparatus for entertainment.

It is another object of the invention to achieve the preceding object while sharpening hockey skills.

It is a further object of the invention to achieve one or more of the preceding objects with apparatus that simulates a tended hockey net automatically.

It is a further object of the invention to achieve one or more of the preceding objects with apparatus that is relatively reliable.

SUMMARY OF THE INVENTION

According to the invention, there is means defining a hockey goal. There is means for supporting a simulated hockey goalie and continuously moving the simulated goalie from side to side across the mouth of the goal to present an obstacle for a player trying to shoot a puck past the simulated goalie into the goal. Preferably there is means such as a rotating endless belt beneath the simulated goalie and the goal for carrying pucks into a side channel which may itself include an endless belt for automatically returning the pucks to the shooting player.

BRIEF DESCRIPTION OF THE DRAWING

Numerous other features, objects and advantages of the invention will become apparent from the following specification when read in connection with the accompanying drawing the sole FIGURE of which is a perspective view of a simulated hockey goalie before a simulated hockey net according to the invention.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

With reference now to the drawing, there is shown a perspective view of a simulated hockey goalie that slides back and forth across the mouth of a simulated hockey net according to the invention. Simulated goalie 1 with hockey stick 1 resting lightly upon the endless belt surface 31 is attached by means of a suitable support 12 to the threaded collar 13 that rides on feed screw 14. Threaded collar 13 carries vertically projecting member 15 arranged for travel along and within a fixed U-shaped channel or track 16 mounted above and parallel to feed screw 14 with the open side facing downward.

The feed screw 14 comprises supporting means above the hockey goal for supporting the simulated hockey goalie 11. The threaded collar 13 comprises means for suspending the simulated goalie from the supporting means for translation across the mouth of the goal from one side of the mouth to the other in a position always obstructing a portion of the mouth. Endless belt surface 31 forms a surface upon which a puck may slide when propelled toward the mouth.

Vertical member 15 functions to prevent rotation of threaded collar 13 so that the latter may move along the axis of feed screw 14 as it is rotated and thereby impart corresponding lateral movement of goalie 11 across the area in front of the goal net 17. Vertical member 15 also functions to trip limiting switches 21 and 22 which are so positioned within track 16 that vertical member 15 contacts and trips one of the limiting switches 21 or 22 when goalie 11 reaches an extremity of the front opening of goal net 17 to reverse the direction of rotation of reversible electric driving motor 23 to reverse the direction of rotation of feed screw 14 and cause a corresponding reversal in the lateral movement of collar 13 and goalie 11. The tripping of a limiting switch 21 or 22 and the resultant reversal in the direction of lateral movement of goalie 11 thus occurs each time that the goalie reaches an edge of the goal net to continuously move the goalie back and forth across the front of the net. Alternately, it is within the principles of the invention to program movement of the goalie in a predetermined manner.

The back-and-forth sweeps of the simulated goalie 11 across the mouth of goal net 17 simulates movements of a goalie in an actual hockey game in blocking pucks propelled toward the goal net from entering. In using the invention, a player 26 propels pucks 24 across smooth surface 25, which may be a hard or other low friction surface, toward goal net 17. The player tries to drive the puck past the simulated goalie 11.

In a preferred embodiment of the invention the surface 31 beneath and before goal net 17 comprises the upper surface of a continuous conveyor belt mounted on rollers 32 and 33, at least one of which is driven to move the belt across the path of pucks aimed at the net. Preferably, the outer surface 31 has a low surface friction to simulate the frictional properties of surface 25 and belt 31 moves sufficiently slowly so that its movement negligibly interferes with the path of the propelled pucks. This belt velocity is small compared to the normal expected velocity of a moving puck while being sufficiently large to move expended pucks from the area inside and around goal net 17 to a depressed trough 34 where expended pucks may be deposited, if desired, on another conveyor belt (not shown) running beside the long edge of surface 25 for return to the player of the apparatus. Means might also be provided for counting the pucks that enter the net. Such means might include a switch actuated by a deflector bar beneath the edge of goal net 17 that would be actuated each time conveyor belt 31 transferred a puck from inside goal net 17 to trough 34.

There has been described novel apparatus and techniques that provide entertainment in the form of challenging a player to score a goal by propelling a puck past a moving simulated goalie. At the same time the player may sharpen his skills in timing and aiming his shots. Means may be provided for varying the speed of the driving motor so that the simulated goalie may traverse the goal mouth at a more rapid rate to present a greater challenge to the more skilled players.

It is evident that those skilled in the art may now make numerous other modifications and uses of and departures from the specific embodiments described herein without departing from the inventive concepts. Consequently, the invention is to be construed as embracing each and every novel feature and novel combination of features present in or possessed by the apparatus and techniques herein disclosed and limited solely by the spirit and scope of the appended claims.
What is claimed is:
1. Hockey apparatus comprising,
   means defining a hockey goal,
   means defining a simulated hockey goalie,
   supporting means above said hockey goal for sup-
   porting said simulated hockey goalie,
   means for suspending said simulated goalie from said
   supporting means for translation across the mouth
   of said goal from one side of the mouth to the other
   in a position always obstructing a portion of the
   mouth,
   and means for continuously translating said means
   for suspending back and forth along said means for
   supporting to move said simulated goalie back and
   forth across the mouth from one edge to the other.
2. Hockey apparatus in accordance with claim 1 and
   further comprising means for transferring expended
   pucks in and around said goal into a puck receiving re-
   ceptacle.
3. Hockey apparatus in accordance with claim 2
   wherein said means for transferring comprises a con-
   tinuous belt beneath said simulated goalie and said goal
   and forming a surface upon which a puck may slide
   when propelled toward said mouth,
   and means for moving said belt at a velocity that is
   small compared to the expected velocity of pucks
   propelled toward the mouth of said goal.
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