To all whom it may concern:

Be it known that I, Eugene Lantz, a citizen of the United States, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Automatic Baseball-Battling-Practice Apparatus, of which the following is a specification.

This invention relates to an automatic base ball batting practice machine and it has for its object to provide a device of this character constructed to test the skill of the batter and of utility, not alone as a batting practice machine, but as an amusement device in amusement parks and like places.

Further objects and advantages of the invention will be more specifically set forth in the detailed description which follows.

In the accompanying drawings:

Figure 1 is a plan view of a machine constructed in accordance with the invention,
Figure 2 is a side elevation thereof,
Figure 3 is a front elevation,
Figure 4 is a vertical sectional view through the top of the structure,
Figure 5 is a detailed sectional view of the lower or pick-up end of the ball elevator, and
Figure 6 is a perspective view of a portion of the pick-up elevator.

Like numerals designate corresponding parts in all of the figures of the drawings.

The particular form of the invention which I have chosen for purposes of illustration comprises a frame consisting of vertical rails 5, inclined rails 6, top platform 7 and bottom frame 8. These parts may be made of any suitable material, either metal or wood, though I prefer to make them of metal and to unite them by removable bolts so that the structure may be readily disassembled when desired, either for purposes of shipment or storage.

The frame work described, supports rollers 9 and 10 over which a pick-up conveyor belt passes. Motion is imparted to the rollers and the pick-up belt from a motor 12 through the medium of a belt 13. The conveyor belt 11 carries a plurality of cups or buckets 14, adapted as they travel around through a depression 15 (see Fig. 5), of bed block 8, to pick up the base balls, indicated at 16 and to elevate them to a position above the platform 7, where they drop on to an inclined trackway 17 and roll toward the outer end of the platform 7. The outward movement of each ball is interrupted by its contact with a hammer head 18, having a cushion 19 upon its lower face. This hammer head is carried by a lever 20 which is mounted to rock upon a shaft 21. This lever is bifurcated and its separated rear ends 22 in the path of movement of contact bars 23 that are carried by the belt 11. A spring 24 is attached to the lever 20 and to the platform 7 and tends to draw the hammer 18 downwardly. Therefore the action of the bars 22 upon the rear ends of the separated legs 20a of the lever 20 elevates the hammer 18 against the tension of spring 23. When the hammer is elevated the ball rolls into a pocket constituted by a pair of spring clips 24 where it rests until the particular bar 22 which has elevated the hammer 18 rides past the arms 20a, whereupon the spring 23 acts to cause the hammer 18 to descend and to strike the ball a sharp blow which drives it through the fingers 25 and causes it to fall toward the bed block 8. When the ball reaches the position indicated at A in Fig. 2 the batter strikes at it or he may strike at it at any point that he sees fit which will test his skill. However, in order to determine the degree of control possessed by the player, I preferably provide a target in the form of a plate indicated at 25, said target being suspended upon a cord or other suitable flexible element indicated at 26. This target is suspended in front of a net back stop at 27 which is suitably connected to and supported from the frame work as indicated at the points 28, 29 and 30. However, it is to be understood that the net may be supported in other ways and from other points.

A back stop for the bat is formed by a pair of belts 31. The upper portions of these belts pass over rollers 32 which are separated by a spacing element 33 and which rollers are mounted upon a rod 34. This rod is spring supported by means of springs 35 the upper ends of which are connected to tension bolts 36, said bolts being supported from brackets 37.

The lower portions of the belt pass over rollers 38 that are supported upon a transverse rod 39. The ends of this rod engage the eyes of eye bolts 40. The lower ends of these eye bolts are bent inwardly and engage with the members 8.
If the batter fails to hit the ball it drops
upon a sand cushion 41 and travels down an
inclined runway 42 of bed block 8° to the
depression 15 where it is again picked up
by the belt 11 and elevated to the hammer
18. The force of the blow delivered by
the hammer 18 may be variably determined
by the shape of bars 22 or by the position
of the arms 20° with respect to said bars.
For example the bars will remain in contact
with said arms longer, and raise the ham-
ero higher before its release, if the arms 20°
are full length, than if said arms are slightly
shorter. Any other relation of these parts
which will secure this result, is within the
scope of the invention.
The motor 12 may be disposed wholly
outside of the frame or it may be supported
upon a base block 43 carried by side brackets
44, of such height that the block 43 is spaced
far enough above the bed block 8°, and its
runway, to permit the balls to roll under
the block 43. It is apparent that many ways
will readily suggest themselves to those
skilled in the manufacture of amusement
devices for carrying out the principles here-
in illustrated, consequently it is to be under-
stood that the invention is not limited to the
precise construction set forth but that it
includes within its purview whatever
changes fairly come within either the terms
or the spirit of the appended claims.
Having described my invention, what I
claim is:
1. A machine of the character described
comprising a ball pick-up mechanism ar-
ranged to carry balls to an elevated position
from which position they fall by gravity,
and a bat stop structure arranged adjacent
to and in the rear of the path of movement
of said balls as they fall by gravity.
2. A device of the character described
comprising a pick-up mechanism adapted
to pick up base balls and carry them to an
elevated position from which elevated po-
tion they fall by gravity, a bat stop ar-
ranged adjacent the path of travel of the
balls as they fall, and a trackway for the
balls arranged to conduct the balls back to
the pick-up position.
3. A structure as recited in claim 2 where-
in the bat stop comprises a pair of spaced
yieldingly mounted belts disposed on op-
posite sides of the line of travel of the balls.
4. A device of the character described
comprising an elevating mechanism for base
balls, a detent to which the balls are de-
ivered from the elevating mechanism, a
hammer adapted to dislodge the ball from
the detent with a blow, a yieldingly mounted
bat stop along the face of which the balls
fall by gravity, and a runway upon which
the balls fall and which conducts the balls
to the pick-up position.
5. A structure as recited in claim 4 where-
in the bat stop comprises a pair of yieldingly
mounted belts.
6. A structure as recited in claim 4 in
combination with a target disposed rear-
wardly of the bat stop.
7. A structure as recited in claim 4 in
combination with a target disposed rear-
wardly of the bat stop and a back stop dis-
posed rearwardly of the target.
8. A structure as recited in claim 4 where-
in the bat stop comprises a pair of spaced
inch-like members and a spring mounting
for said members.
9. A device of the character described
comprising a supporting frame, a travel-
ing pick-up mechanism adapted to elevate
base balls to the top of the frame, a track-
way extending laterally from the upper end
of the pick-up mechanism, a yielding deten
to which the balls are conducted along said
trackway, a pivoted hammer comprising
portions terminating adjacent the pick-up
mechanism, and members carried by the
pick-up mechanism and adapted to engage
said portions to operate the hammer to
elevate the same, a spring for returning
the hammer to cause it to strike the ball and
drive it from the said mechanism, a bed
block upon which the balls fall said bed
block comprising a runway and a pocket
in the runway in which the lower edge of
the pick-up mechanism travels.
10. A structure as recited in claim 9 in
combination with a pair of yieldingly
mounted spaced belts constituting a bat
stop, the belts being spaced far enough
apart to permit the passage of a ball that
is struck between them and a target dis-
posed rearwardly of said belts.
11. A structure as recited in claim 9 in
combination with a bat stop comprising a
pair of belts and yielding mounting for the
same, said belts being disposed upon sides
of the line of travel of the ball with suf-
ficient space between them to permit of the
passage of the ball therethrough, a target
disposed rearwardly of the bat stop, and a
back stop supported from the frame and,
in turn, supporting the target.

In testimony whereof I affix my signature.

EUGENE LANTZ.