

CLAIMS

1. A dice shaking mechanism, the dice shaking mechanism comprising,
a driving member;
5 a drive shaft connected to the driving member, the drive shaft in communication with a crank pin;
wherein the drive shaft is arranged to rotate about a drive shaft axis, the crank pin having a crank pin axis offset from the drive shaft axis;
a control arm and a lifting member;
10 wherein the control arm has a first end and an opposing second end, the first end connected to the crank pin, the control arm being arranged to move the lifting member along a vertical axis of the dice shaking mechanism; and wherein the lifting member comprises a frame attached to the second end of the control arm; and a platform attached to the frame.
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2. A dice shaking mechanism as claimed in claim 1, wherein the lifting member is arranged to reciprocally move between a first position and a second position, each of the first position and the second position located on the vertical axis of the dice shaking mechanism.
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3. A dice shaking mechanism as claimed in claim 2, wherein the first position is located vertically above the second position.
- 25 4. A dice shaking mechanism as claimed in any of the preceding claims further comprising,
a limiting mechanism,
wherein the limiting mechanism is arranged to restrict the movement of
30 the platform to between the first position and the second position.
5. A dice shaking mechanism as claimed in any one of the preceding claims, wherein the platform has a platform width; and wherein the frame has a frame width.

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6. A dice shaking mechanism as claimed in any of the preceding claims further comprising,
a guiding mechanism,
wherein the guiding mechanism is arranged to restrict the motion of the platform reciprocally along the vertical axis.
7. A dice shaking mechanism as claimed in claim 6, wherein the guiding mechanism is a rigid rod and, wherein the frame is attached to the rigid rod.
8. A dice shaking mechanism as claimed in claim 7, wherein the frame is slidably attached to the rigid rod.
9. A dice shaking mechanism as claimed in any of the preceding claims further comprising,
a sensor; and
an actuator.
10. A dice shaking mechanism as claimed in claim 9, wherein the actuator is arranged to activate the sensor.
11. A dice shaking mechanism as claimed in claims 9 and 10, wherein the sensor is positioned opposing the actuator.
12. A dice shaking mechanism as claimed in any of claims 9, 10 or 11, wherein the sensor is positioned at a fixed point on the frame or the housing.
13. A dice shaking mechanism as claimed in any of claims 9, 10 or 11, wherein the actuator is positioned at a fixed point on the frame or the housing.
14. A dice shaking mechanism as claimed in any of the preceding claims, further comprising,
a housing arranged to accommodate,
the frame; and
the driving member; and
the drive shaft; and

the control arm; and
the limiting mechanism.

5 15. A dice shaking mechanism as claimed in any of the preceding claims, further
 comprising,
 a screen member protruding from the housing.

 16. A dice shaking mechanism as claimed in claim 15, wherein the screen member
 is cylindrical.

10 17. A dice shaking mechanism as claimed in claim 2, further comprising,
 a damping component to assist with the final location of the dice.