WHAT IS CLAIMED IS:

1. An auxiliary apparatus adapted to be coupled to a cutting apparatus including a chuck table having a holding surface for holding a workpiece thereon, cutting means including a cutting blade mounted thereon with a mounting nut, for cutting the workpiece held on the chuck table, X-axis feeding means for processing-feeding the chuck table along an X-axis, Y-axis feeding means for indexing-feeding the cutting means along a Y-axis perpendicular to the X-axis, and Z-axis feeding means for incising-feeding the cutting means along a Z-axis perpendicular to the X-axis and the Y-axis, the holding surface being defined along the X-axis and the Y-axis, the auxiliary apparatus comprising:

cutting blade storing means for storing a plurality of cutting blades therein;

unloading and loading means for unloading cutting blades from and loading cutting blades into the cutting blade storing means;

Y-axis positioning means for selectively bringing the unloading and loading means into a working position and a retracted position along the Y-axis with respect to the cutting blade storing means;

Z-axis moving means for moving the unloading and

loading means along the Z-axis; and

X-axis moving means for moving the unloading and loading means along the X-axis to act on the cutting blade mounted on a spindle of the cutting means,

wherein the unloading and loading means includes

a Z-axis rotational shaft extending along the Z-axis;

a blade holder coupled radially to the Z-axis rotational shaft for holding the cutting blade under suction thereon, and

a mounting nut holder for threading a mounting nut over or off an externally threaded distal end portion of the spindle, and

wherein the unloading and loading means is coupled to a distal end of a bendable arm by the Z-axis rotational shaft, and

wherein

the cutting blade storing means includes

a drive gear having a rotational shaft extending along the Y-axis,

a driven gear spaced from the drive gear along the Z-axis and having a rotational shaft extending along the Y-axis,

an endless track trained around the drive

gear and the driven gear, and

a plurality of blade support shafts disposed at predetermined spaced intervals on the endless track, for supporting the cutting blades by being inserted in central openings defined in the cutting blades, the blade support shafts extending along the Y-axis.

2. The auxiliary apparatus according to claim 1,

wherein the unloading and loading means is disposed in a frame by the bendable arm, and the frame is slidably supported on a guide rail disposed on a vertically movable table and extending along the Y-axis and is selectively positionable in the working position and the retracted position with respect to the cutting blade storing means by the Y-axis positioning means.

3. The auxiliary apparatus according to claim 1 or 2, wherein

the bendable arm advances and retracts the unloading and loading means along the X-axis.

4. The auxiliary apparatus according to claim 1, wherein

a distance along the Z-axis between the drive gear and the driven gear is adjustable, and a length of the endless track is adjustable.

5. The auxiliary apparatus according to claim 1,

wherein

each of the cutting blades storable by the cutting blade storing means includes a hub blade having a base and a cutting edge disposed on an outer circumferential portion of the base,

each of the blade support shafts has an outside diameter commensurate with an inside diameter of a central opening defined in the hub blade, and

the blade holder holds the hub blade.

6. The auxiliary apparatus according to claim 1, wherein

each of the cutting blades storable by the cutting blade storing means includes a washer blade including an annular cutting edge,

each of the blade support shafts has an outside diameter commensurate with an inside diameter of a central opening defined in the washer blade, and

the blade holder holds the washer blade and a mount flange for mounting the washer blade on the spindle of the cutting means.