CLAIMS

1. A workpiece manipulating apparatus comprising:

first and second support frames disposed spaced apart from each other; and

first and second fixtures each being rotatably supported on a respective one of the first and second support frames;,

wherein each of the first and second fixtures comprising an upper clamping plate and a lower clamping plate, the clamping plates movably coupled to each other for clamping opposite end portions of the workpiece, and

the upper and lower clamping plates form a cylindrical external surface such that the first and second fixtures being rotatable relative to the first and second support frames about a horizontal axis to turn the workpiece.

~~wherein the first and second fixtures are to clamp opposite end portions of the workpiece thereto, and~~

~~wherein the first and second fixtures being rotatable relative to the first and second support frames about a horizontal axis to turn the workpiece.~~

~~2. The apparatus of claim 1, wherein the first and second fixtures having cylindrical external surfaces engaged to the first and second support frames to support rotation of the first and second fixtures.~~

~~3. The apparatus of claim 2, wherein each of the first and second fixtures including a pair of clamping plates movably coupled to each other for clamping the workpiece therebetween.~~

4.2. The apparatus of claim ~~3~~2, further including an ~~first~~ upper linking ~~portion~~ beam to ~~fix~~ link the ~~first~~ upper clamping plates together, and a ~~second~~ lower linking ~~portion~~ beam to ~~fix~~ link the ~~second~~ lower clamping plates together.

5.3. The apparatus of ~~claim 2~~any one of claims 1 or 2, further comprising a driving mechanism engaged to at least one of the first and second fixtures to rotate the fixture.

6.4. The apparatus of claim ~~5~~3, wherein said at least one of the first and second fixtures including a plurality of pins attached thereon, said plurality of pins being disposed along a circumference of said at least one of the first and second fixtures, each pin being aligned parallel to the horizontal axis, wherein the driving mechanism having a gear engaged to the plurality of pins to rotate the fixture.

7.5. The apparatus of claim ~~6~~4, wherein the plurality of pins are distributed along a full circle of the circumference.

8.6. The apparatus of claim ~~6~~4, wherein the plurality of pins are distributed along a half circle of the circumference.

9.7. The apparatus of claim 1, wherein a distance between the first and second support frames being variable.

10.8. The apparatus of claim 1, wherein at least one of the support frames includes a platform to allow operator access.