Claims:

1. A device for cold forming a metal work piece comprising
a roller die having a first die formed in a circumferential face;
a linear die having a second die formed on a receiving surface for receiving the work piece;
a press for applying a load to the roller die;
wherein the roller die, whilst under load from the press, is arranged to roll across the linear die so as to have the first and second dies applied to opposed faces of the work piece, and so progressively cold form the work piece;
such that the first die varies in shape along a circumferential path around said roller die, and along an orthogonal axis of said work piece;
wherein the roller die includes a gear mounted circumferentially around said roller die and the linear die includes a rack such that said gear and rack are in mesh engagement to facilitate rolling of said roller die across said linear die;
wherein said press roller includes a gear mounted circumferentially around said press roller such that the press roller gear is in mesh engagement with the roller die gear;
further including a rack mounted parallel to the linear die rack and in mesh engagement with the press roller gear.

2. The device according to claim 1 wherein the second die varies in shape along a longitudinal path along of said linear die, and along an orthogonal axis of said work piece.

3. The device according to any one of the preceding claims further including a horizontal press arranged to bias the roller die to roll across the linear die.

4. The device according to any one of the preceding claims further including a press roller intermediate the press and the roller die through which the load is applied to the roller die.

5. A method for cold forming a metal work piece, the method comprising the steps of:

providing a roller die having a first die formed in a circumferential face, such that the first die varies in shape along a circumferential path around said roller die and along an orthogonal axis of said work piece;

providing a linear die having a second die formed on a receiving surface

said receiving surface receiving the work piece;

applying a load to the roller die;

and simultaneously rolling the roller die across the linear die so as to have the first and second dies applied to opposed faces of the work piece;

and consequently progressively cold forming the work piece;

wherein the roller die includes a gear mounted circumferentially around said roller die and the linear die includes a rack such that said gear and rack are in mesh engagement to facilitate rolling of said roller die across said linear die;

wherein said press roller includes a gear mounted circumferentially around said press roller such that the press roller gear is in mesh engagement with the roller die gear;

further including a rack mounted parallel to the linear die rack and in mesh engagement with the press roller gear.