ABSTRACT

Papercutting is the art form of cutting paper with sharp scissors or a knife. It can be as simple or intricate as the paper artist chooses. It has definitely stood the test of time and will continue to be popular art form amongst many cultures. Many famous paper artists of the past still inspire current paper cutting practices. The art has evolved uniquely all over the world to adapt to different cultural styles. One traditional distinction most styles share in common is that the designs are cut from a single sheet of paper as opposed to multiple adjoining sheets as in collage. This paper presents a kinematic study of a mechanism using a Geneva wheel and a gear train to achieve intermittent motion. The main motive of this project is to design a mechanism for cutting by giving intermittent feed. The intermittent feed is given by continuous rotation of circular disk in Geneva mechanism. We have designed a chain drive with the help of Geneva mechanism, which is used for giving feed and gives smooth operation and smooth movement of the feed at required time interval. The fabrication and design of paper cutting machine using Geneva mechanism is useful to cut the papers in equal and accurate dimension. Geneva drive is an indexing Mechanism that converts continues motion to intermittent motion, Due to which paper is moved between the intervals of cutting period.