**Straight bevel gears** are the simplest to produce and the most widely applied [conical gear](https://www.sciencedirect.com/topics/engineering/conical-gear) type. These gears have straight teeth cut along the pitch cone that if extended would intersect with the shaft axis (as shown in Fig. A and B). Moreover, the teeth are tapered in thickness along the face width and may have either constant or tapered height [6]. The areas of application of straight bevel gears are generally limited to low-speed drives, where vibration and noise may not be significant. These gears are however used for automobile differential gear system and other industrial applications.

Gear transmissions such as bevel and plan are widely used in a many kinds of machines and vehicles because of their reduced cost, power-to-weight ratio and high efficiency.

 

