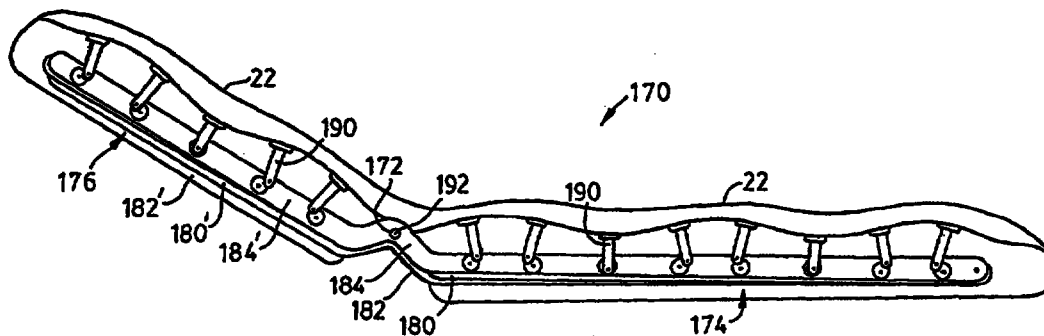




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(54) Title: MECHANISM FOR GENERATING WAVE MOTION**(57) Abstract**

The present invention provides a wave generating apparatus for generating waves in for example beds, chairs and the like. In one aspect the device includes a motor driven crankshaft to which are attached several longitudinal beams. The beams mounted on the crankshafts are offset with respect to each other in such a way as to produce a phase shift between the beams. Each beam is provided with several links pivotally attached at one end to each beam and the links are spaced apart along each beam by a distance equal to the desired wavelength of the wave being produced. The other ends of each link is attached to a flexible membrane which forms a support surface of the bed or chair. The links from the different beams are interleaved at equal phase intervals so as to produce a traveling wave in the flexible membrane so that a complete wave passes during each full rotation of the crankshaft assembly. In another embodiment the motor is replaced by a generator and the mechanical movement of the flexible membrane driven by a fluid for example is converted into other forms of mechanical or electrical power.