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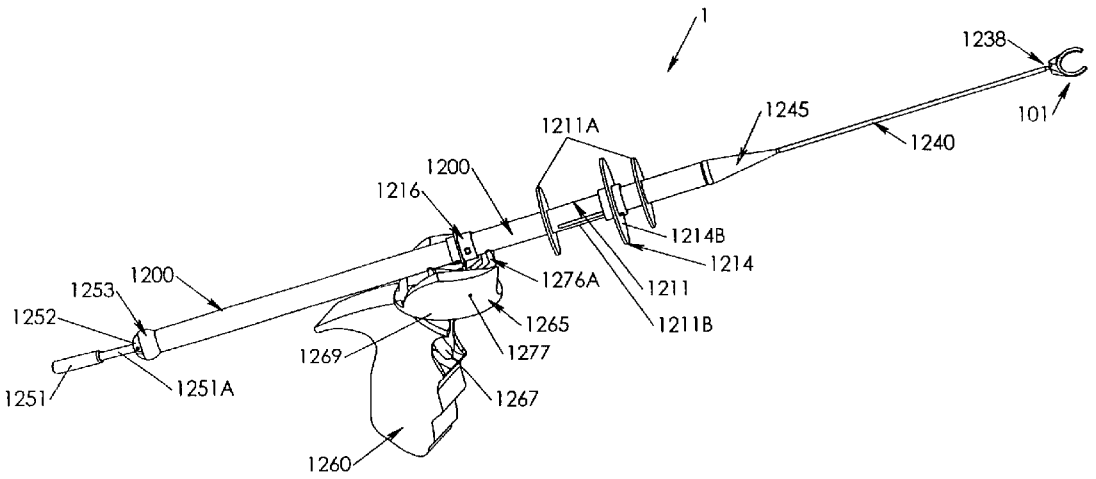
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(54) Title: APPARATUS AND METHOD FOR THREAD ADVANCING



(57) Abstract: A cycling suturing and knot-tying device (1) is characterized by an arcuate fixed, grooved or recessed way (102) provided in a correspondingly-shaped support frame (775) for accommodating a curved needle (50) fitted with thread, and frictional needle-engaging devices (112) provided in the way (102) for selectively engaging the needle (50) and driving the needle (50) in one or both rotational directions to suture a wound with the thread. A pistol-grip operating apparatus (1267) having a transmission tube (1200) that mounts the frame (775) and the way (102) in articulating relationship and rotates and articulates with respect to the pistol grip (1267) carries various operating elements that interface with the frictional needle-engaging devices (112) in the way (102). In at least one embodiment, needle direction-adjusting elements (134, 136) are provided in the frame (775) in cooperation with selected devices in the way (102) for determining the direction of needle rotation. Auxiliary thread-handling or incrementing and knot-tying devices (1101, 1000) are also disclosed.

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