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United States Patent [19]

Robertson [45] Date of Patent: Oct. 12, 1999

| [54] | SURGICAL FASTENER APPLYING DEVICE | | |
|------|-----------------------------------|---|--|
| [75] | Inventor: | John C. Robertson, Cheshire, Conn. | |
| [73] | Assignee: | United States Surgical Corporation , Norwalk, Conn. | |
| [21] | Appl. No.: | 09/076,933 | |
| [22] | Filed: | May 13, 1998 | |
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| [51] | Int. Cl. ⁶ . | A61B 17/068 | |
| [52] | U.S. Cl | 227/176.1 ; 227/19; 227/175.2; | |
| | | 227/178.1 | |
| [58] | Field of S | earch 227/19, 175.1, | |
| | | 227/176.1, 178.1, 179.1, 180.1, 175.2 | |

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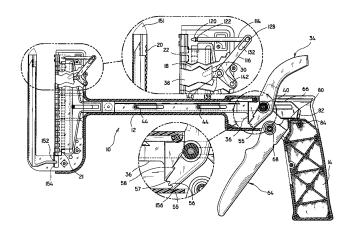
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Primary Examiner—Scott A. Smith

[57] ABSTRACT

A fastener applying device for applying surgical fasteners to body tissue is provided. The fastener applying device includes an approximation mechanism having a single actuator to perform fast closure and incremental approximation of a cartridge carrier and anvil. The cartridge carrier and anvil can be approximated into a multiplicity of predetermined firing enabled positions. An adjustment member is operably associated with a firing mechanism of the device to vary the maximum stroke of a pusher bar. The adjustment member facilitates ejection of multiple size fasteners from the device.

9 Claims, 19 Drawing Sheets

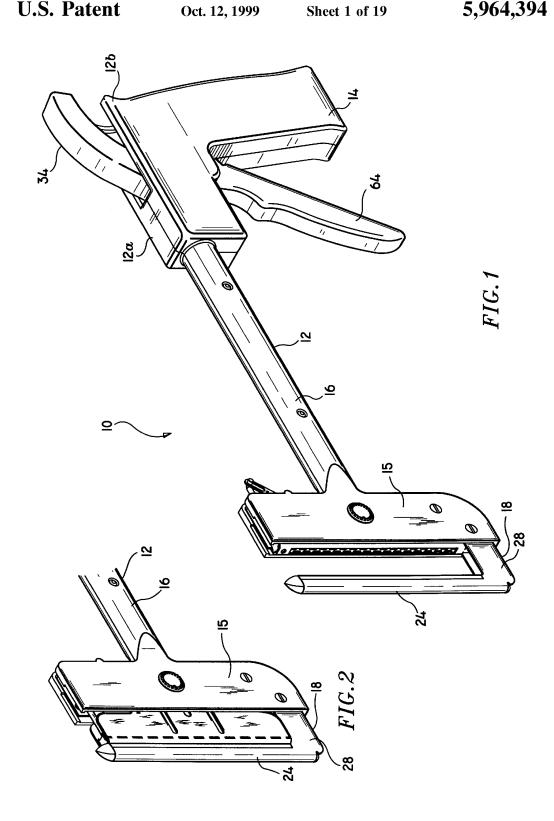


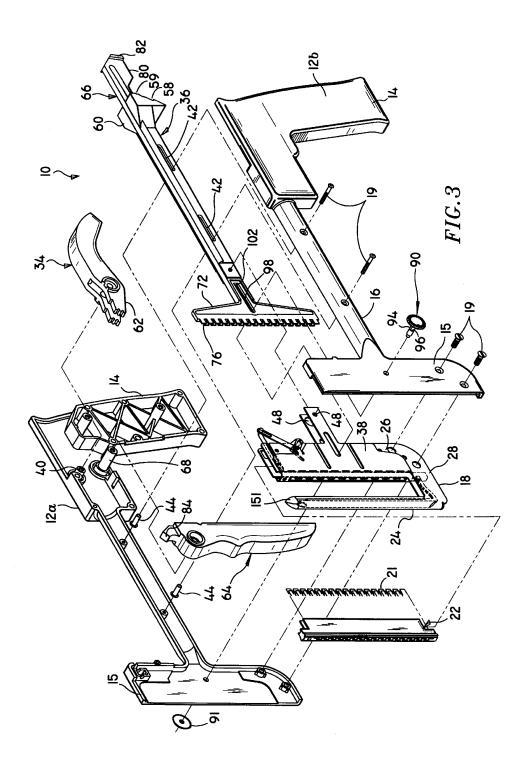


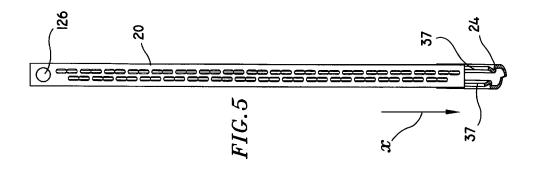
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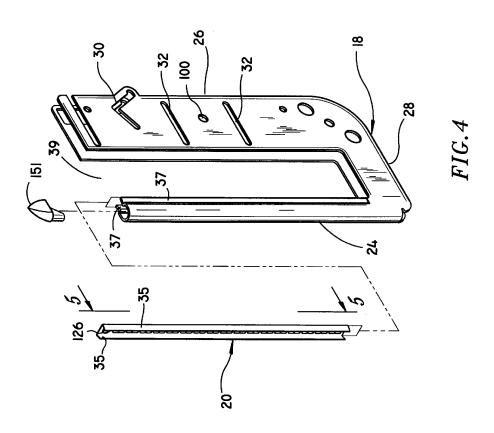








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