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**United States Patent** [19]  
**Robertson**

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[54] **SURGICAL FASTENER APPLYING DEVICE**

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[73] Assignee: **United States Surgical Corporation**,  
Norwalk, Conn.

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**Related U.S. Application Data**

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Pat. No. 5,810,240.

[51] **Int. Cl.**<sup>6</sup> ..... **A61B 17/068**

[52] **U.S. Cl.** ..... **227/176.1; 227/19; 227/175.2;**  
**227/178.1**

[58] **Field of Search** ..... **227/19, 175.1,**  
**227/176.1, 178.1, 179.1, 180.1, 175.2**

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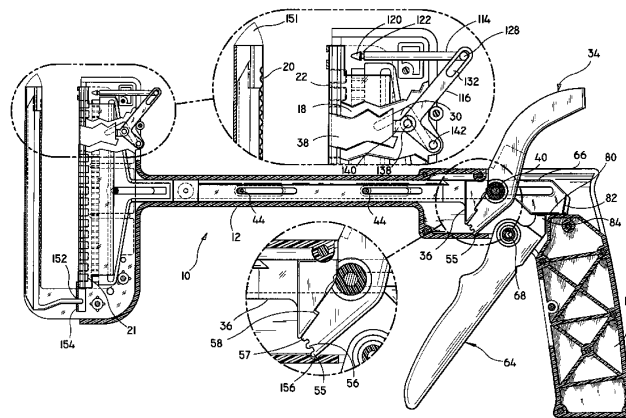
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*Primary Examiner*—Scott A. Smith

[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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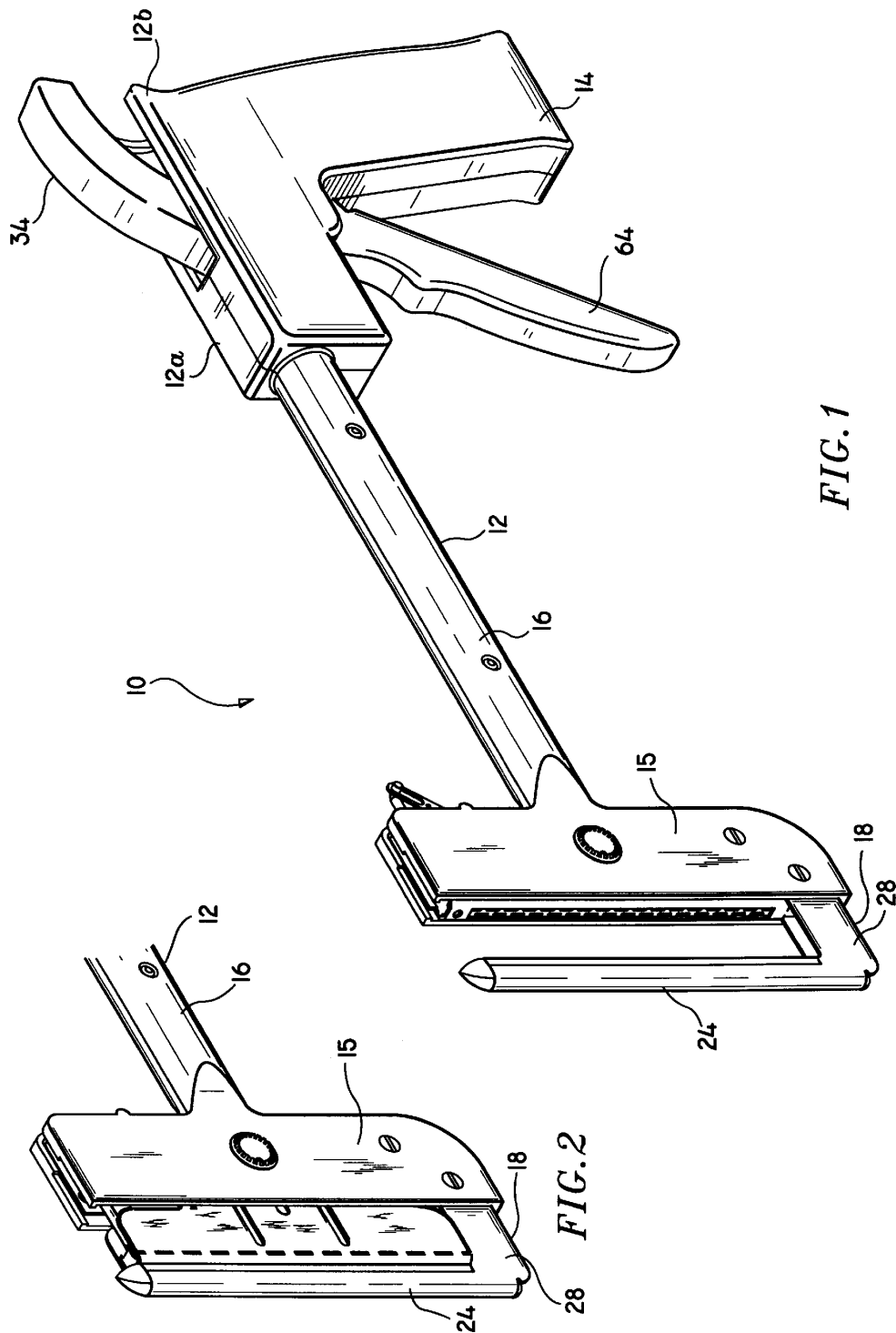


FIG. 1

FIG. 2

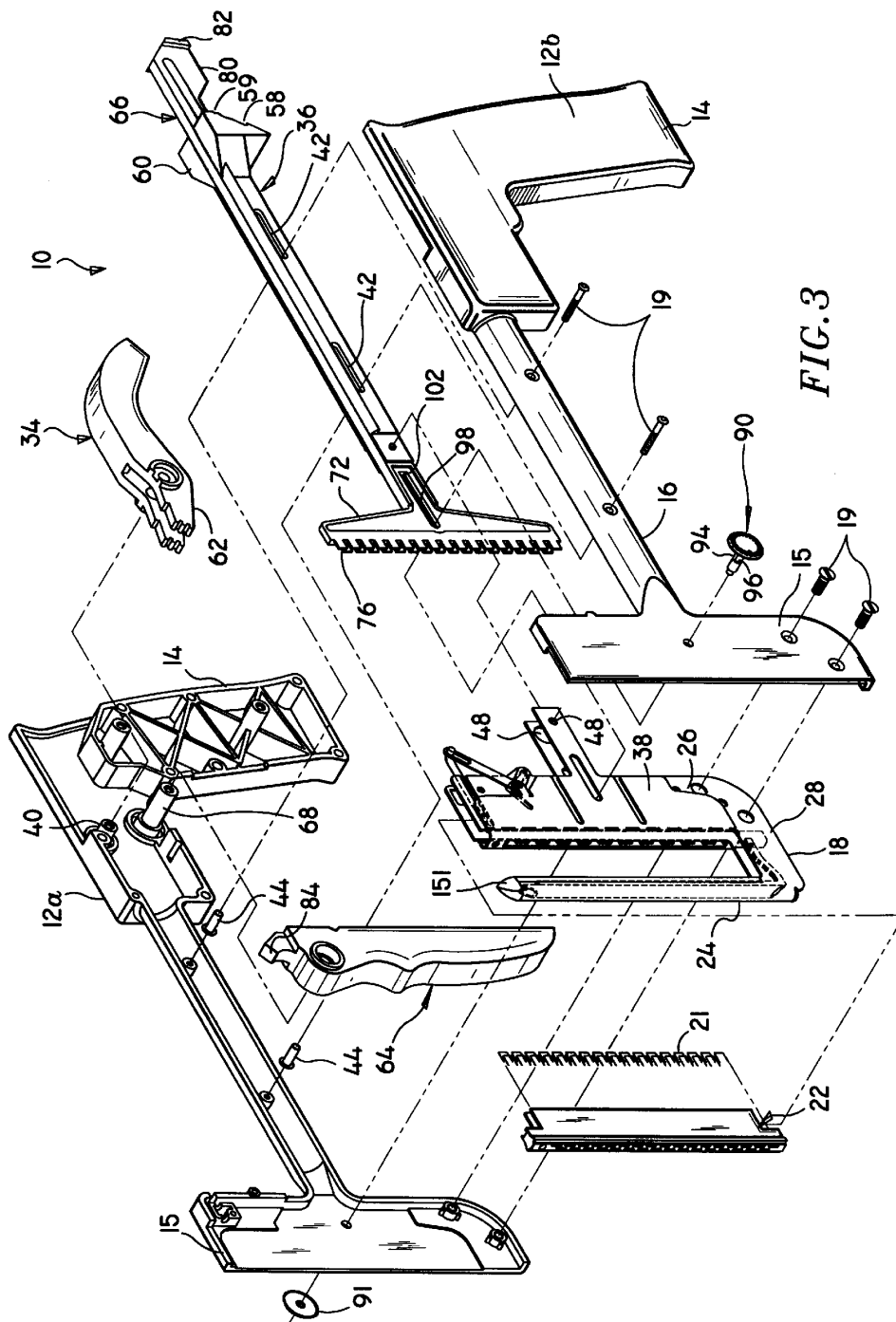


FIG. 3

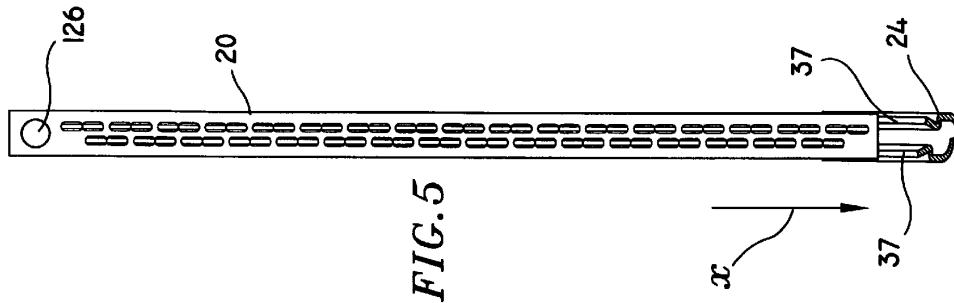


FIG. 5

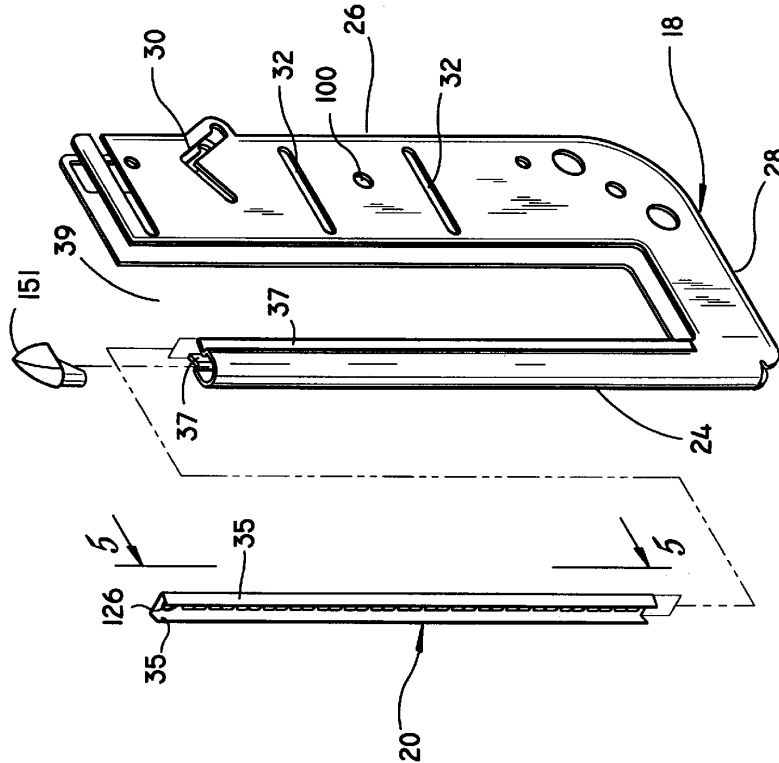


FIG. 4

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