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United States Patent [19]

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Olson et al.

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[54] **LINEAR STAPLING MECHANISM WITH CUTTING MEANS**

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[73] Assignee: **Ethicon, Inc., Somerville, N.J.**

[57] **ABSTRACT**

[21] Appl. No.: **917,636**

A stapler mechanism is described which contains a stapling assembly, and anvil assembly, firing means and knife means. These means are activated by a firing trigger. The anvil assembly is closed upon the stapling assembly by means of a closure trigger. The firing trigger is inoperable until the closure trigger has been activated. Another mechanism in the stapler is capable of locking the closure trigger after use so it does not spring open inadvertently before use of the firing trigger. Additionally, the stapler mechanism allows forward motion of both triggers and also is capable of allowing reverse motion of the closure trigger to open the mechanism.

[22] Filed: **Jul. 20, 1992**

Related U.S. Application Data

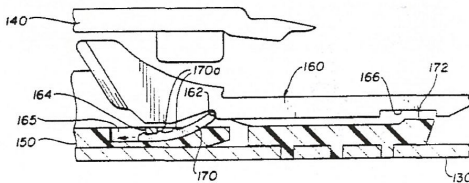
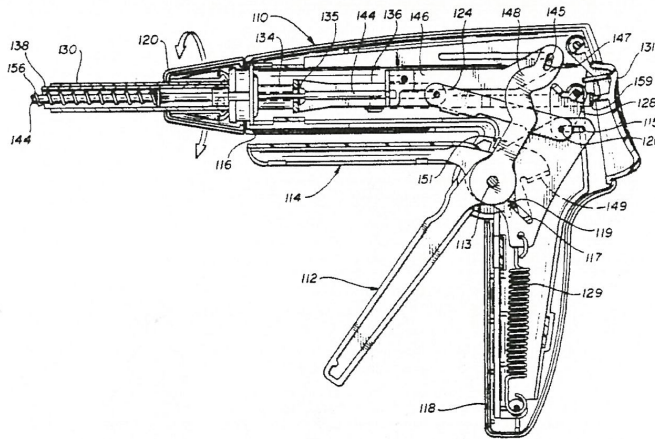
[63] Continuation-in-part of Ser. No. 779,436, Oct. 18, 1991, abandoned.

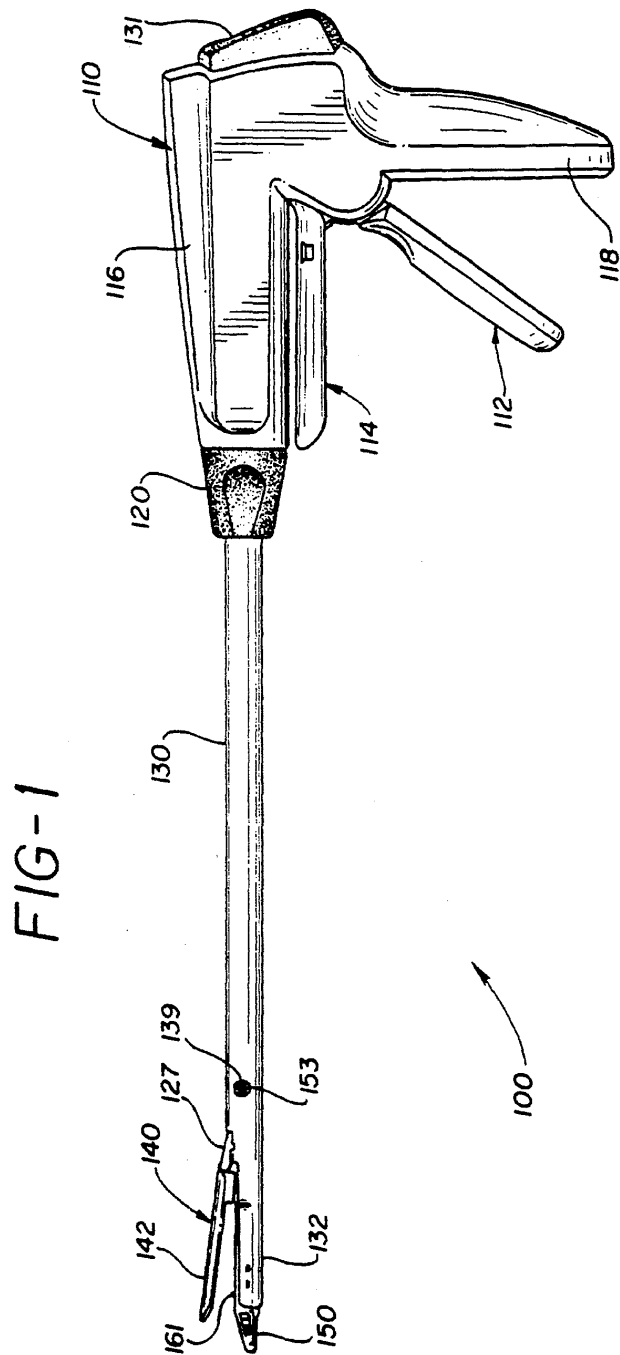
[51] Int. Cl.⁵ **A61B 17/072**

[52] U.S. Cl. **227/178; 227/19; 227/180**

[58] Field of Search **227/19, 180, 176, 178**

22 Claims, 18 Drawing Sheets





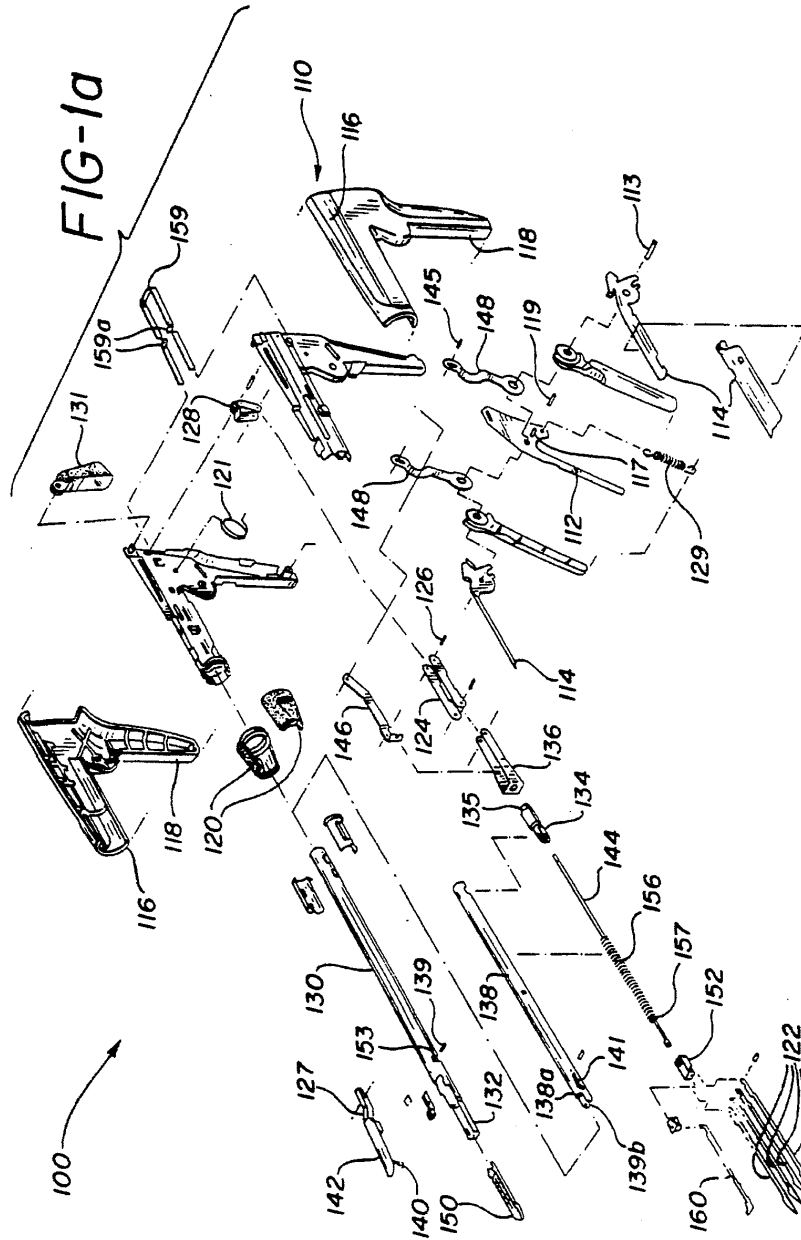
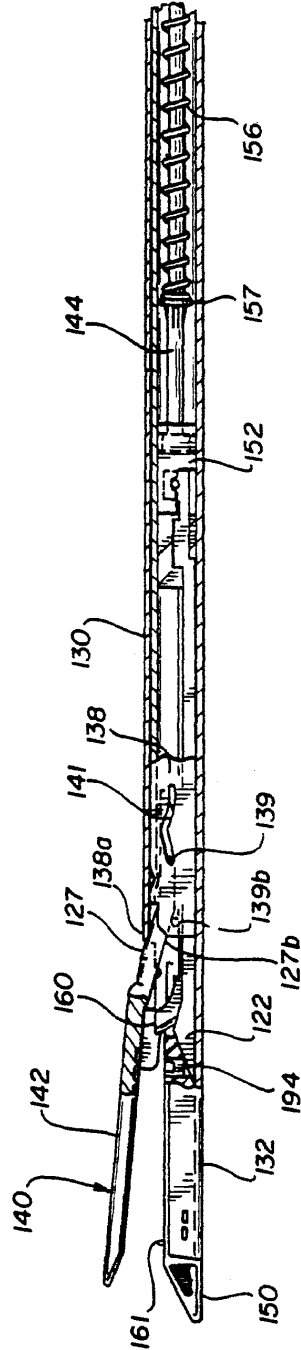


FIG-2a



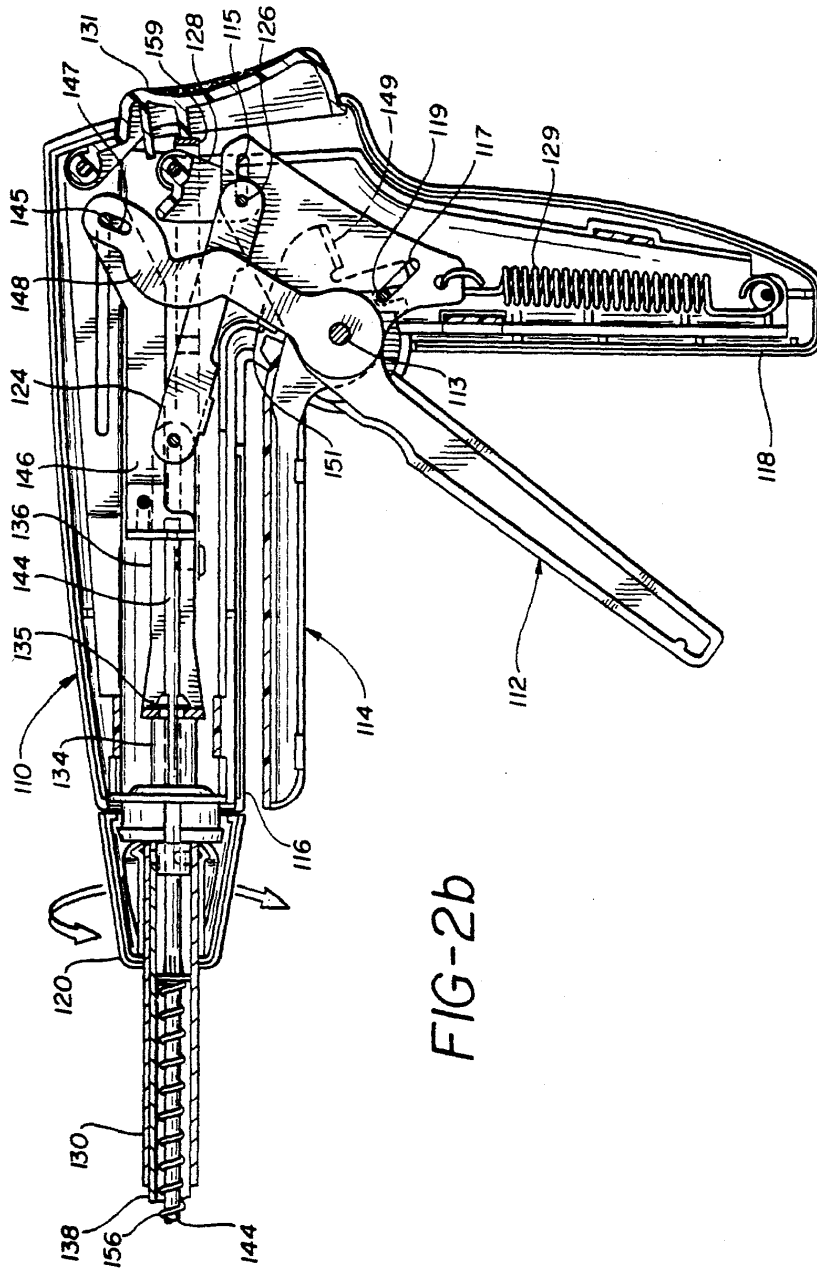


FIG-2b

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