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United States Patent [19]

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Viola et al.

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- [54] **SELF-CONTAINED POWERED SURGICAL APPARATUS FOR APPLYING SURGICAL FASTENERS** 4,705,038 11/1987 Sjostrom et al. .
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(List continued on next page.)

[21] Appl. No.: **08/883,790**

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[22] Filed: **Jun. 27, 1997**

Related U.S. Application Data

- [63] Continuation of application No. 08/319,852, Oct. 7, 1994, abandoned, which is a continuation-in-part of application No. 08/287,455, Aug. 5, 1994, abandoned.
- [51] **Int. Cl.⁶** **A61B 17/068**
- [52] **U.S. Cl.** **227/176.1; 227/79; 227/178.1; 227/180.1**
- [58] **Field of Search** **227/176.1, 175.1, 227/178.1, 180.1, 19**

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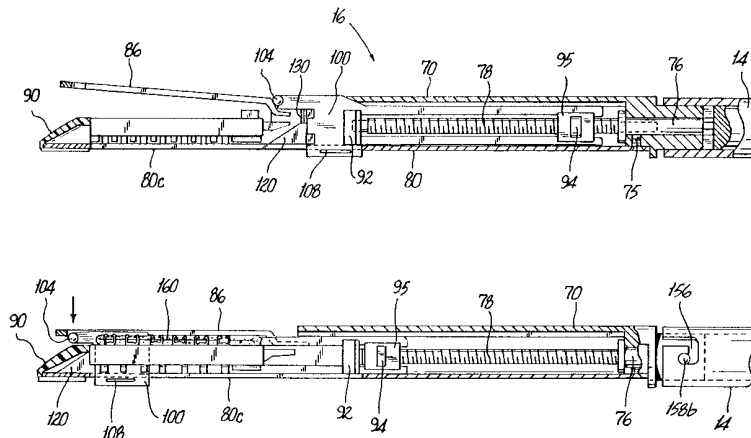
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Primary Examiner—Scott A. Smith

[57] ABSTRACT

A self-contained powered surgical apparatus for applying surgical fasteners to body tissue is disclosed which includes a handle assembly, a gear motor assembly disposed within the handle assembly, a power source disposed within the handle assembly for energizing the motor assembly, an elongated body extending distally from the handle assembly, a cartridge assembly detachably connected to a distal end portion of the elongated body, and an elongated drive shaft extending through the elongated body and detachably coupling the motor assembly to the cartridge assembly.

26 Claims, 9 Drawing Sheets



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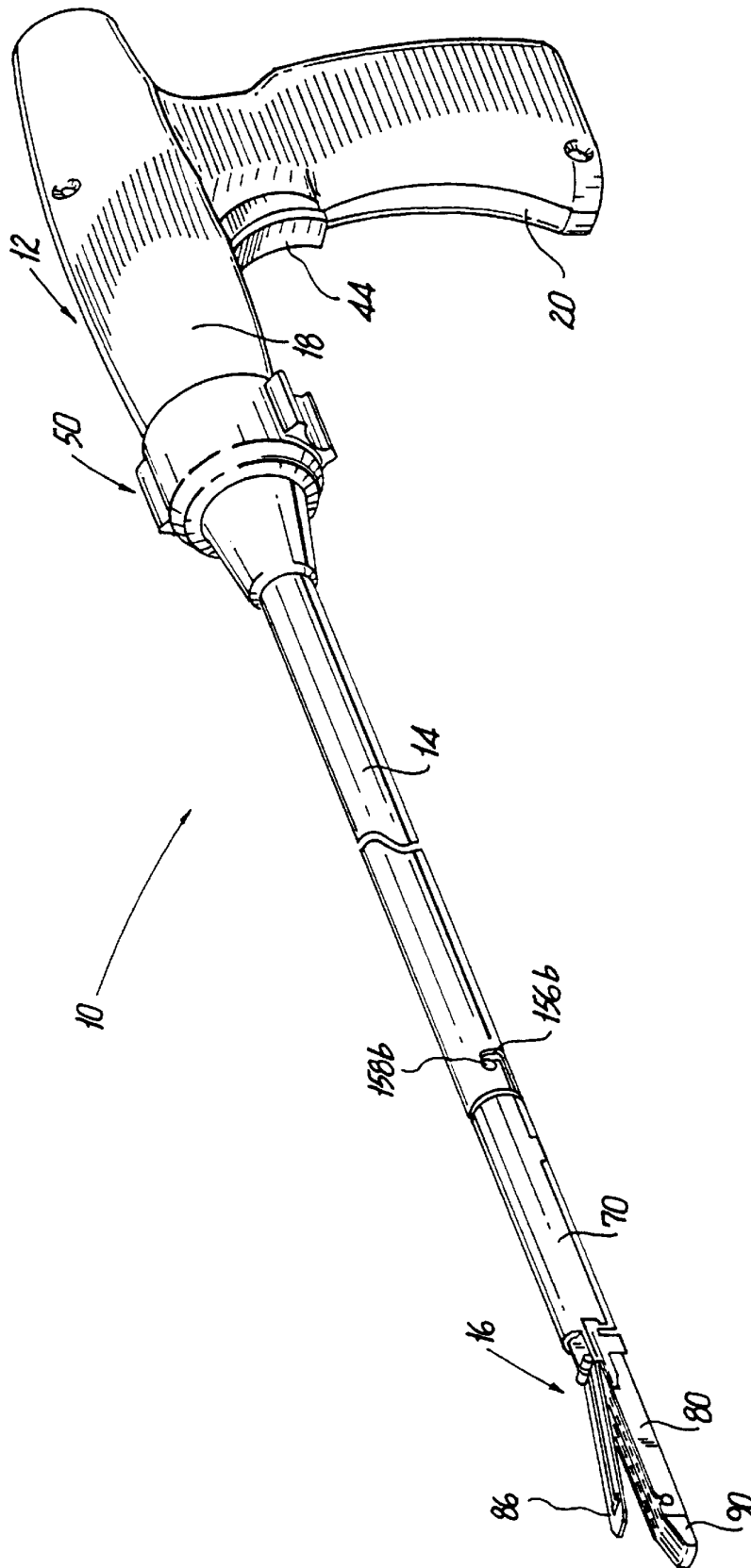


Fig. 1

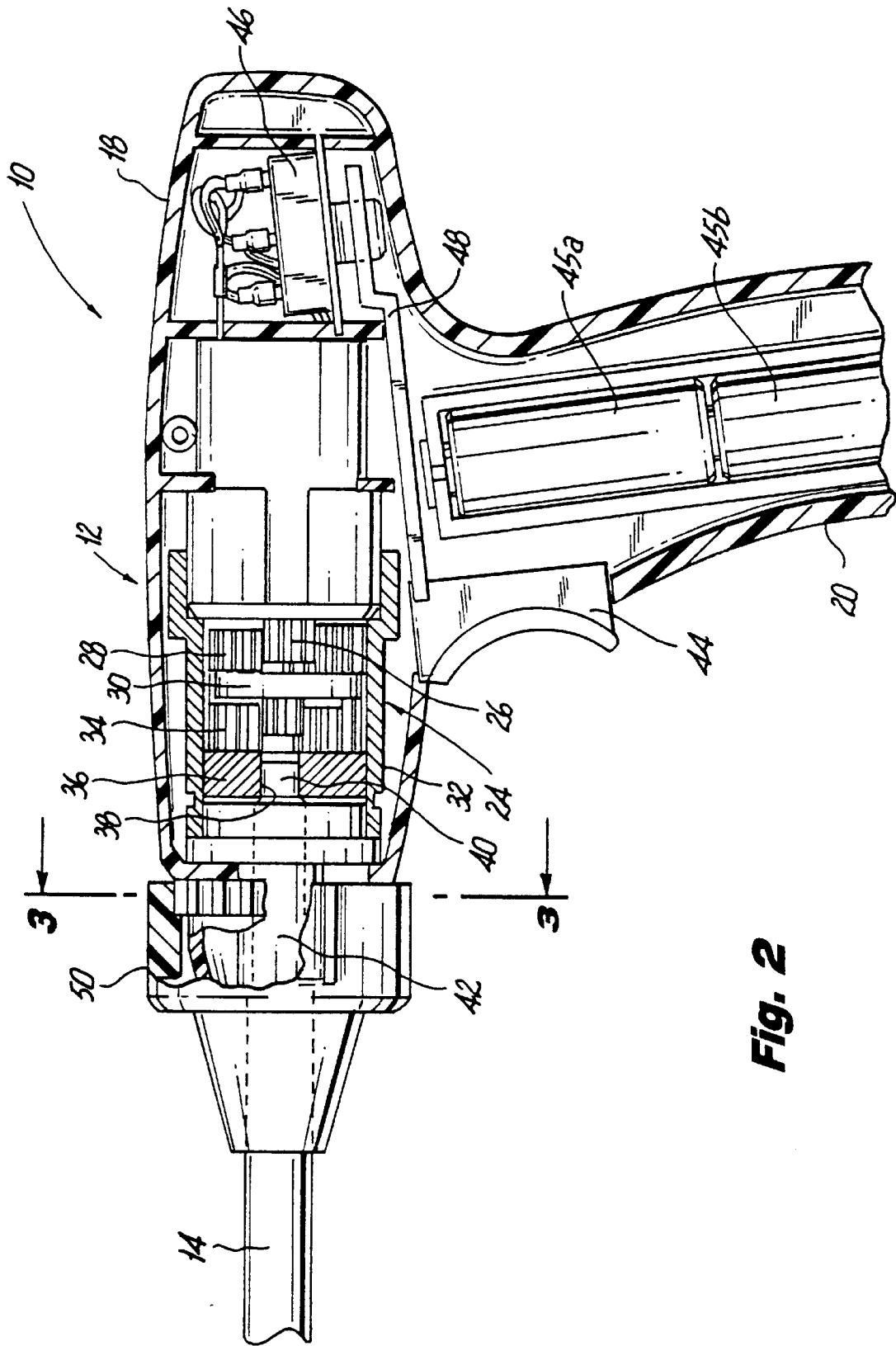


Fig. 2

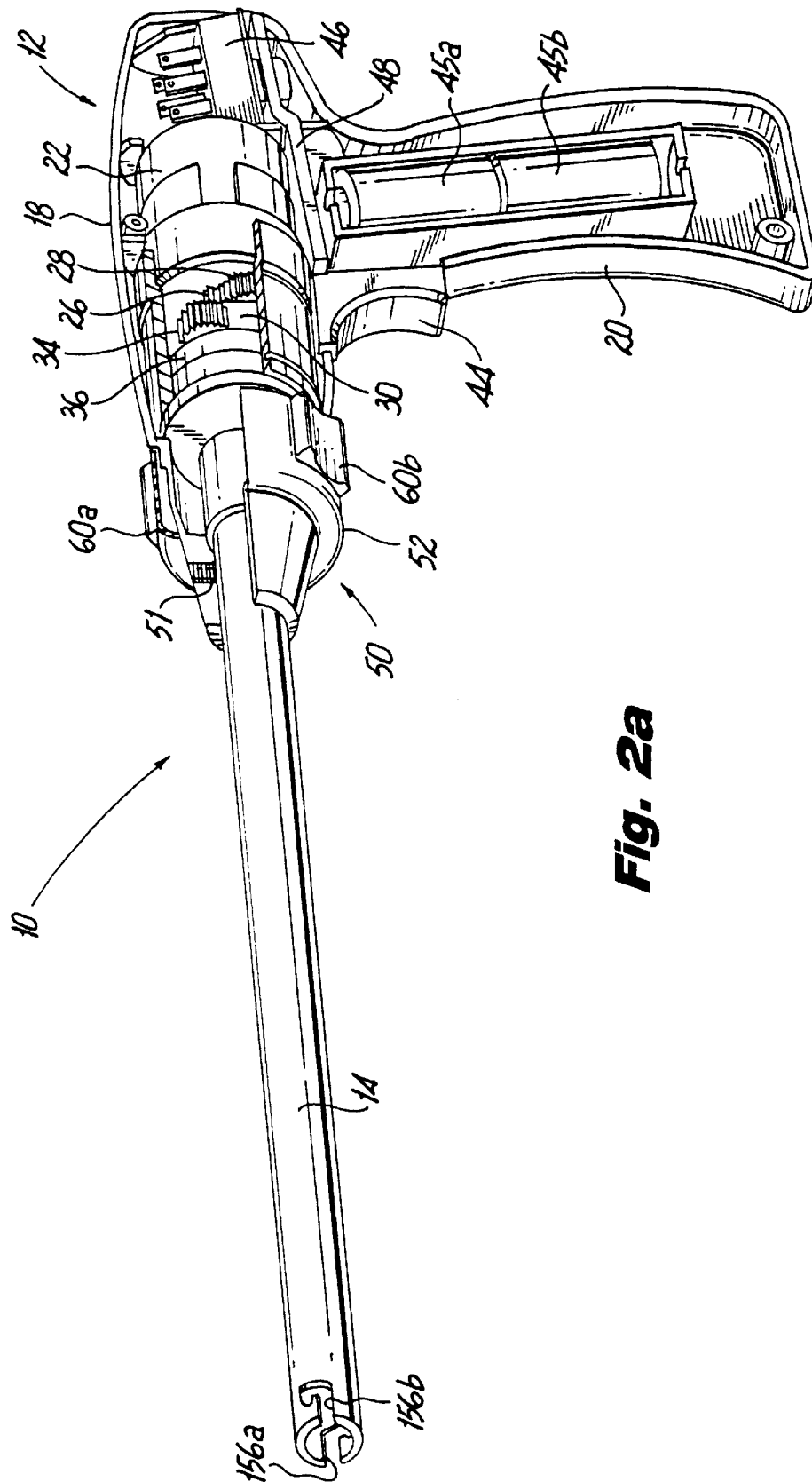


Fig. 2a

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