[0006] In an example, a surgical clip applying device comprises:

an enclosure formed from a top housing, a bottom housing and a window cover;

a pair of handles including a left handle and a right handle each mounted for pivotal movement in the bottom housing;

a main rail fixedly mounted to the bottom housing within the enclosure including an elongate base and upstanding sidewalls defining a U-shaped channel;

a pair of clip applying jaws fixedly attached to the bottom housing and mounted through the main rail, the pair of clip applying jaws having arms terminating with a pair of spaced opposing jaw heads and including a pair of angled ramp surfaces disposed in said arms spaced inwardly from said jaw heads;

a jaw closer comprising an elongate base defining a first plane, the jaw closer including a pair of drive flanges disposed at a proximal end of the jaw closer, wherein the pair of drive flanges define a second plane substantially perpendicular to the first plane, a V-shaped indent in a distal end of the jaw closer defining cam members at its distal end and an elongate slot defined in the base intermediate the distal end and proximal end of the jaw closer, the jaw closer being disposed between the clip applying jaws and the base of the rail and mounted for slideable movement in the channel toward and away from the jaw heads, the cam members being configured to engage and compress corresponding ramp surfaces on the arms of the clip applying jaws thereby forcing the arms and the jaw heads together as the jaw closer is advanced towards the jaw heads; and

a drive mechanism including a plurality of levers and at least one spring, connecting

the handles to the upstanding drive flanges of the jaw closer, the drive mechanism configured to translate an actuation of the pair of handles to linear motion of the jaw closer.

[0007] The surgical clip application device or clip applier disclosed herein is expected to offer convenience compared to devices and systems that require manually loading individual clips.

[0008] It is another advantage of the present disclosure to provide a surgical clip application device (e.g., clip applier) with automatic surgical clip reloading.

[0009] Additionally, another advantage of the present disclosure is to provide a surgical clip application device (e.g., clip applier) with a transparent window thereby allowing a user to easily ascertain a remaining clip count for surgical clips housed within the device.

[0010] It is a further advantage of the present disclosure to provide a surgical clip application device (e.g., clip applier) with multiple touch points, finger loops, and gripping surfaces for ambidextrous surgical clip application.

[0011] Additional features and advantages of the disclosed surgical clip application device (e.g., clip applier), systems, and methods are described in, and will be apparent from, the following Detailed Description and the Figures. The features and advantages described herein are not all-inclusive and, in particular, many additional features and advantages will be apparent to one of ordinary skill in the art in view of the figures and description. Also, any particular embodiment does not have to have all of the advantages listed herein. Moreover, it should be noted that the language used in the specification has been principally selected for readability and instructional purposes, and not to limit the scope of the inventive subject matter.