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United States Patent [19]**Jansen**[11] **Patent Number:** **5,123,456**[45] **Date of Patent:** **Jun. 23, 1992**[54] **BANDING TOOL WITH INCLUDING CLAMPING PLUNGER**[75] **Inventor:** **George A. Jansen, Denver, Colo.**[73] **Assignee:** **Band-It-Idex, Inc., Denver, Colo.**[21] **Appl. No.:** **593,124**[22] **Filed:** **Oct. 5, 1990**[51] **Int. Cl.⁵** **B21F 9/02**[52] **U.S. Cl.** **140/93.4; 140/123.6; 140/150**[58] **Field of Search** **140/93.2, 93.4, 123.6, 140/150, 152, 153, 154; 81/9.3**[56] **References Cited****U.S. PATENT DOCUMENTS**

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Primary Examiner—Lowell A. Larson*Attorney, Agent, or Firm*—Sheridan Ross & McIntosh[57] **ABSTRACT**

A banding tool (10) is provided to tension and lock a band (12) and a buckle (14) around an object (16). The tool (10) has a housing (18) and a pull-up/cut-off handle (20) for cooperatively tensioning the band (12). Upon properly tensioning the band (12) around the object (16), the handle (20) is further manipulated to engage a locking/cutting lever (26). The lever (26) engages a head (42) which holds a punch (46) therein and includes a surface (49). The punch (46) first contacts the band (12) to deform and lock the band (12) to itself. The surface (49) of the head (48) then bends and cuts the tail (134) from the band (12).

25 Claims, 11 Drawing Sheets