



US005890563A

United States Patent [19]

[11] Patent Number: **5,890,563**

Avitan et al.

[45] Date of Patent: ***Apr. 6, 1999**

[54] LIFT TRUCK MAST HOSE REEVING SYSTEM WITH CHAIN GUIDEWAY

[75] Inventors: **Isaac Avitan; Lev M. Bolotin; Robert Weihe**, all of Sioux City, Iowa

[73] Assignee: **Schaeff, Incorporated**, Sioux City, Iowa

[*] Notice: This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

[21] Appl. No.: **689,508**

[22] Filed: **Aug. 13, 1996**

[51] Int. Cl.⁶ **B66F 9/06**

[52] U.S. Cl. **187/228; 414/631**

[58] Field of Search 187/228, 227, 187/226, 229, 222; 414/631, 629

[56] References Cited

U.S. PATENT DOCUMENTS

2,432,411	12/1947	Guemin et al.	187/228
4,238,004	12/1980	Olson .	
4,485,894	12/1984	Soule .	
4,592,449	6/1986	Sakata et al.	187/228

Primary Examiner—Kenneth Noland
Attorney, Agent, or Firm—Natter & Natter

[57] ABSTRACT

Hydraulic hose lines between an inner rail and an adjacent outer rail of a lift truck mast are reeved within a hollow chain guideway. Opposite ends of the chain are fixed to vertical channels; one channel is mounted to the outer rail and the other, to a center support of the inner rail, with the lowermost portion of the chain looped between the channels. The distance between the chain portions seated in each channel provides an unobstructed operator viewing window. Elevating the inner rail causes the chain to progressively separate from the outer rail channel and engage the inner rail channel while lowering of the inner rail causes the chain to separate from the inner rail channel and engage the outer rail channel.

20 Claims, 8 Drawing Sheets

