

United States Patent [19]

Houst et al.

[11] 3,788,050

[45] Jan. 29, 1974

[54] IMPACT ABSORBER FOR ROTARY
MOWER BLADE

3,623,305 11/1971 Freedlander et al..... 56/295
2,691,180 10/1954 Pineles..... 30/347 X

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[52] U.S. Cl..... 56/295, 30/347, 30/DIG. 6

[51] Int. Cl..... A01d 55/18

[58] Field of Search... 56/295, 255, 256, 17.5, 13.6,
56/13.7, 13.8, 16.7, 16.8, 16.9, 17.1, 17.2,
17.3, 17.4; 172/13-17; 30/DIG. 5, DIG. 6, 347

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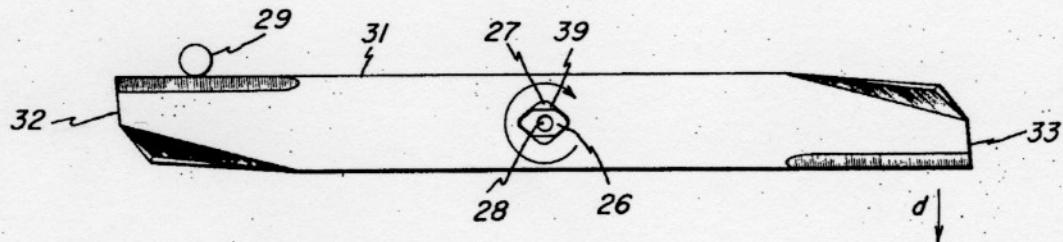
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[57] ABSTRACT

A resilient spacer element is inserted between the drive shaft mounting bolt and the central aperture of a horizontal cutting blade such that when one end of the rotating blade contacts a relatively immovable object the shear stress will cause the axis of the blade to shift relative to the axis of the shaft rather than break or bend the shaft and mounting bolt. The aperture and spacer are shaped such that a cavity exists therebetween on each side transverse to the blade, with the cavity decreasing in longitudinal cross section with increasing lateral distance from the blade center. As the spacer is displaced into the cavity, the degrees of elasticity is initially high and decreases with increased displacement.

14 Claims, 9 Drawing Figures



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SHEET 1 OF 2

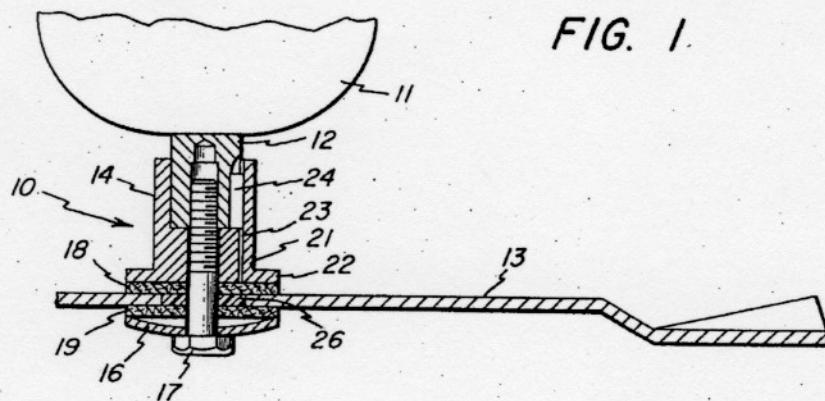


FIG. 2

