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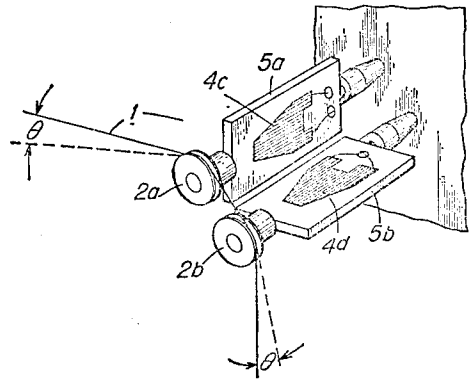
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PUBLISHED MAY 6, 1975

934 OG 7

T934,002
TENSOMETER
George Cheatham Trail, Jr., 138 Dovershire Drive, Matthews, N.C. 28105
Continuation of application Ser. No. 292,569, Sept. 27, 1972. This application Sept. 24, 1973, Ser. No. 400,452
Int. Cl. G01l *5/10*
U.S. Cl. 73—144
1 Sheet Drawing. 10 Pages Specification



An improved electro-mechanical threadline-tensometer that gives an indicated tension that is largely independent of the error angle between the calibration position and the actual position of the tensometer in use, is provided by having at least one pair of conventional strip-cantilever tensometer heads mounted perpendicular to each other. In the most preferred embodiment the axes of heads are merely parallel rather than being in-line, and the calibration position is such that the calibrating load causes equal deflection in each of the strip cantilevers. The percentage error in indicated tension, caused by an error angle of θ in positioning the tensometer in actual use, is less than 0.5% for θ of $\pm 5°$; less than 1.5% for θ of $\pm 10°$; and less than 3.5% for θ of $\pm 15°$.

May 6, 1975 G. C. TRAIL, JR T934,002

TENSOMETER

Original Filed Sept. 27, 1972

FIG. 5

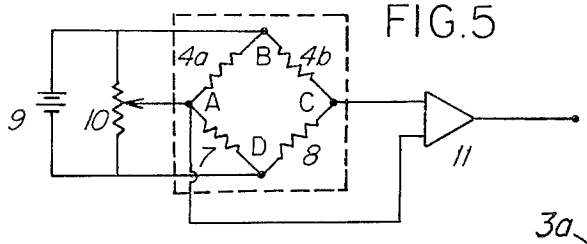


FIG. 1

FIG. 2

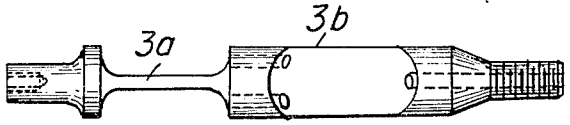


FIG. 3

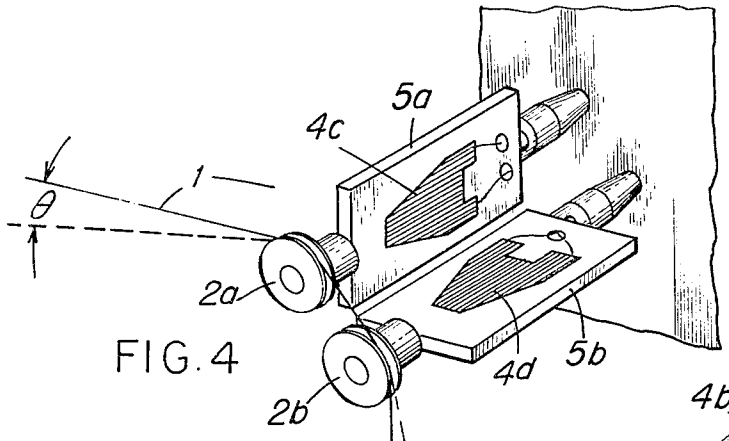


FIG. 4

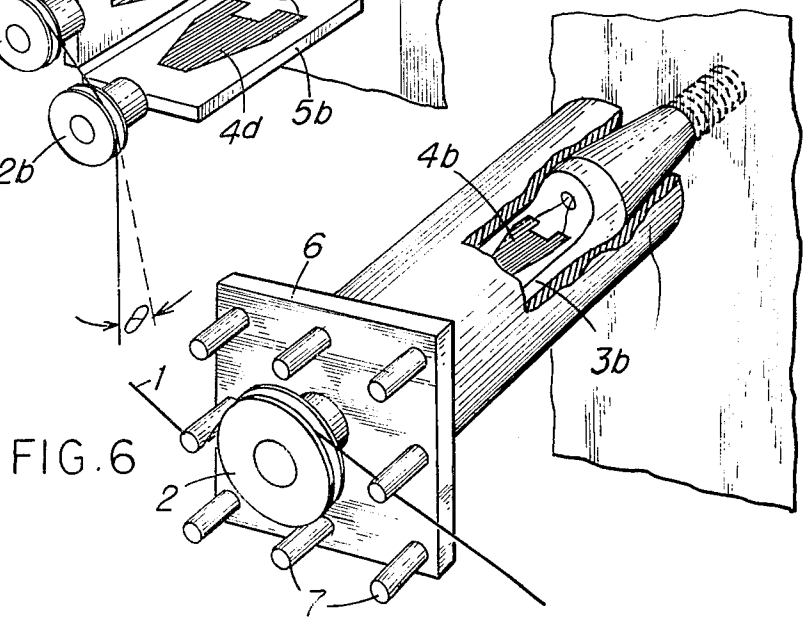


FIG. 6