

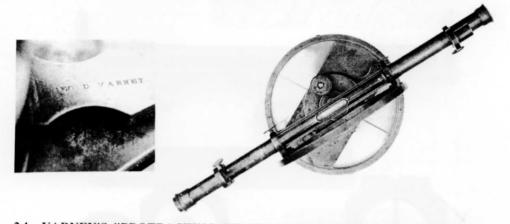
TESSERACT

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ONE OF FIVE RECORDED EXAMPLES



24. VARNEY'S "PROTRACTING CIRCUMFERENTOR AND THEODOLITE," American, c.1845, signed "Geo. D. Varney" and "Patented June 24, 1843." This innovative form of theodolite has a 12-1/2" (32 cm) long sighting tube riding in a 4-3/4" (12 cm) diameter vertical circle graduated every degree ±45°, with five-arcminute vernier readout. Two moveable peep sights, and a 4-1/4" spirit level vial are attached to the main tube. This assembly rides on a horizontal degree circle with five-arcminute vernier, racked azimuth motion, and magnetic compass below, complete with needle lifter and rotational clamp screw. The original tripod mount has a most unusual four-screw leveling design, with two vertical and two horizontal screws. Condition is fine, the brass darkened with age, the outfit complete with original mahogany tripod, later carrying case, and photocopy of Varney's patent. A rarely seen early American invention from Newbury, Massachusetts.

