

PERCEPTIONS SCIENTIFICA

*Instruments of Early Science, Technology & Medicine*

WINTER 87/88



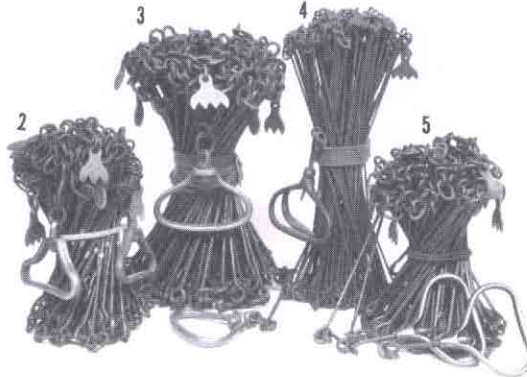
**1 GURLEY'S RAILROAD COMPASS WITH TELESCOPE ATTACHMENT**, American, signed and dated "W. & L.E. Gurley, Troy N.Y., Jas. W. Queen & Co., Agents, Phila.", and on the telescope "Patented July 9 1878". This impressive instrument is made of bright lacquered brass, and with telescope attached measures 20" in length. The graduated horizontal circle has a single 30' vernier and a directly-connected slow motion tangent screw. The compass has an internal magnetic variation index and a 5" long needle. The compass main-plate carries opposing level-bubble vials (one cracked) and an outkeeper, (a device used to keep track of the number of chains measured). The telescope measures 8 3/4" in length and retains 98% of the original lacquer. The compass retains 90% of its original lacquer. The ball and socket mount is lacking. The original case retains the trade label of the retailer "Jas. W. Queen & Co.". A very rare American railroad compass in fine condition.....\$1695

**2 20 METER LINK CHAIN**, English, late 19th century, signed "Chesterman Sheffield". This chain has two brass handles, brass tally tags and brass half-link markers on the iron links. It is in very good condition.....\$195

**3 HEAVY 100' ENGINEERS LINK CHAIN**, English, c-1890, signed "Chesterman Sheffield". This chain consists of 100 1 foot links, .154" in diameter, brass handles and tally tags every 10 feet. It is in very good condition.....\$185

**4 100' LINK CHAIN**, American, late 19th century, signed, "Keuffel & Esser, N.Y.". This chain has 100, 1 foot links, brass tally tags every 10 feet and brass handles. It is in very good condition.....\$200

**5 AMERICAN 4 POLE LINK CHAIN**, late 19th century, signed, "W. & L.E. Gurley Troy N.Y.". The chain consists of 100 open-links, brass handles and tally tags. It is in very good condition. ....\$250



**6 EARLY MASSACHUSETTS PLAIN COMPASS**, American, pre-1828, signed in flowing script "J. Pool & Compy, Easton Mafs." This beautiful plain compass has a 14 3/4" gracefully-shaped compass plate fitted with opposing level-vials, and sight vanes measuring 7 1/2" tall. The compass well measures 6" in diameter and is engraved with a decorative 4-point rose, including floral points and a central motif of crosshatching and pineapples. The compass is complete with a hand-dovetailed walnut case and swivel-socket staff-mount. It is in very fine condition, note the loss of silvering to the compass face.....\$1150



7 GIMBALED HEDLEY MINING DIAL WITH INCLINOMETER, English, fourth quarter 19th century, signed "J. & W.E. Archbutt 201 Westminster Bridge Rd. London, #2515". An 11" long mainplate with folding sight vanes carries a silvered-dial compass measuring 5" in diameter. The gimballed compass has two opposing level-bubble vials, and a graduated circle adjustable by rack-and-pinion, read through a window set into the face of the compass. A double-graduated 180 degree vertical arc attaches to the side of the mainplate (one screw lacking) and records vertical angles while the compass stays level. The instrument retains 75% of the original bright lacquer, and is in very good condition. The original case includes a staff mount, and plummet.....\$765



8 WAGON WHEEL PENDULUM-ODOMETER, American, late 19th century, signed "Keuffel & Esser Co., New York". A leather-covered cylindrical container 5" in diameter, holds a heavy double-dialed pendulum-counter and frame. The outer dial records from 0-100 revolutions, and the inner dial, read directly through a window in the outer dial, records each 100 rotations of the outer dial. When strapped to the spokes of a wagon wheel, the pendulum odometer will record up to 10,000 revolutions of the wheel. The given circumference of the wheel will then give distance traveled. An early photograph illustrating the odometer in use, is included within an article by Norman Wright in *Rittenhouse*, Journal of the American Scientific Instrument Enterprise, Vol.1, No.4, pp.107-112. The instrument is in fine condition. The case has one weakened leather strap.....\$325

9 POCKET LEVEL AND RIGHT-ANGLE FINDER, Continental, late 19th century, stamped "D.R.P.36795". The leather-covered kidney-shaped case for this unusual and special instrument, measures only 6" in length. Contained inside is a swivel-socket mount with a tapered screw for post attachment, a 4 3/4" drawtube telescope with attached level-vial and vertical tangent screw, and an adjustable plate which fits the vertical axis and allows only right angles to be turned. A well-made and unique pocket instrument.....\$395

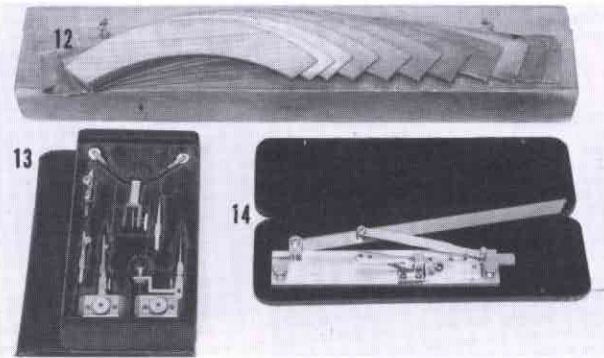


10 AMERICAN TELESCOPIC VERNIER COMPASS, c-1875, signed in script, "L. Beckman, Toledo O. 755.". Standing 12" tall, this unusual instrument is constructed of bright brass and incorporates a 6" compass housing with an internal variation-index and 9" long transiting telescope. The unusual leveling-base design may be a variation of Bulloch's leveling-base, a German design possibly adopted by Beckman prior to his immigration from Germany to the United States in 1870. The instrument is in good display condition; note that the vertical motion of the telescope binds. It is complete with the original hand-dovetailed mahogany case, and original straight-leg tripod. A uniquely-designed American instrument.....\$750

A. Bedini, S., EARLY AMERICAN SCIENTIFIC INSTRUMENTS AND THEIR MAKERS, 1964, 2nd ed., 189 pp., excellent illustrated reference.....\$35



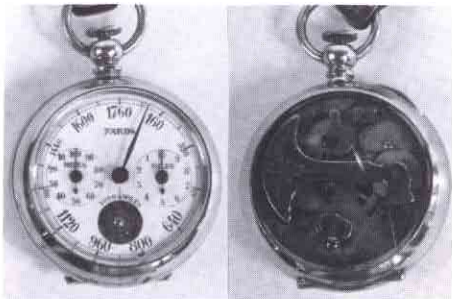
**11 EARLY NEW YORK TRANSIT**, American, mid-19th century, signed in script, "E. & G.W. Blunt, New York". This early all-brass transit measures 10 1/2" tall and includes a 3 1/2" needle in a silvered and decoratively-engraved compass-well, two 30' verniers, early style directly-threaded slow-motion tangent-screws, and a four-screw leveling base. The instrument has a darkened patina and is in nice display condition; note tight horizontal motions. The original stiff-leg tripod and a later fitted-case accompany the instrument.....\$595



**12 WOODEN RAILROAD-CURVE TEMPLATES**, American, c-1900, signed, "W. & L. E. Gurley, Troy N.Y.". This set of twelve graduated curves, each marked 1-12 degrees, are contained in a wooden case 18" long. Several of the curves have ink-pen marks on them, otherwise the set is complete and in fine condition.....\$120

**13 BEAM-COMPASS TRAMMEL-POINTS WITH WHEEL ATTACHMENT**, German-made for the American market, signed, "Keuffel & Esser Co. N.Y., Paragon". This quality set includes the scarce ivory-wheeled attachment that serves as a rider for one end of the beam. The set is complete and in fine condition.....\$195

**14 PRECISION SECTION-LINER**, German, c-1900, signed, "Riefler". This fine shading instrument is made of nickel silver and measures 8 1/2" in length. The variable-angle marking-blade can be set from 1 1/2:1 through 1:1 ratio slope and is advanced by a lever-activated ratchet. The instrument is housed in the original velvet-lined leather-covered fitted case. Both case and instrument are in fine condition.....\$295

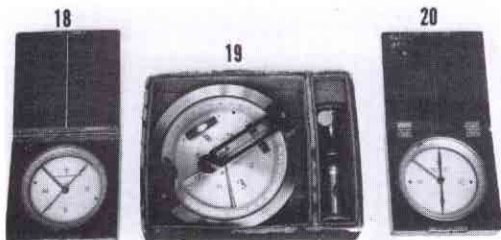


**15 FRENCH PEDOMETER**, c-1900?, signed, "Brevette DRGM SGDG". The nickel-plated-brass case measures 1 3/4" in diameter and has beveled crystals exposing both the face and the movement through the back of the case. The four-dial enameled face measures in yards, 1-10 miles, 10-100 miles and 1000-10,000 miles! The pedometer is in very fine condition..\$225



**16 EIGHTEENTH CENTURY SURVEYORS COMPASS**, English, mid-18th century, signed, "C. Lincoln, London". This large brass compass measures 17" in length and has a 5 7/8" long inlaid needle. The very attractive silvered and engraved face (some minor oxydation on the edges), has the west indicator marked to the left of north, a mistake made by many early instrument manufacturers not familiar with the use of the instrument. The compass plate has two threaded holes (probably for a later-fitted level vial) and a needle arrestor screw. An early and attractive surveyors compass.....\$775

17 QUALITY AMERICAN SURVEYING TRANSIT, c-1900, signed in script, "Heller & Brightly, Makers, Philada 7807". This large all-brass instrument measures 14 1/2" tall, has a 5" needle, two 30' horizontal verniers, a fully-housed vertical circle, and a detachable 4-screw leveling base. It is a very finely-made instrument that appears to have seen little use. The original case is in good condition and retains a few accessories as well as the original trade-label. Heller & Brightly were recognized as the inventors of the spring-opposed slow-motion tangent-screw in the year 1871, although the same adaptation had been in use in England for over 75 years.....\$695



18 K&E POCKET COMPASS, American, c- 1910. The 3 3/4" square mahogany-housed compass is in very good condition.....\$60

19 CASED POCKET COMPASS, French, c-1900. This compass measures 5 1/8" in diameter and features folding sight vanes, opposed level vials and a jacobs-staff mount. The lined cloth-covered case is lacking the lid. The compass and staff-mount retain 98% of their original finish and are in very fine condition.....\$150

20 K&E POCKET COMPASS, American, c-1900. The 3 3/4" mahogany-housed compass is in good condition.....\$60

21 QUALITY POCKET-CLINOMETER / ABNEY LEVEL, English, late 19th century. This finely made abney level incorporates a vernier index arm, silvered scale and a grayed brass finish. It is complete with a decoratively-tooled-red-leather velvet-lined case, all in fine condition..\$150



22 CASED HYPSONETER, American, c-1900, signed, "Keuffel & Esser Co. N.Y.". This instrument, used to find the height of objects, consists of a staff-mounted base-rule 6" long, a hinged sighting rule with a tangent-screw, and an altitude scale with attached pendulum. With a known base line, heights of objects may be read directly from the altitude scale. The instrument is complete with case and in fine condition. ....\$165

23 CASED ABNEY LEVEL, English?, late 19th century. This abney level measures 5" in length and has a vernier index arm. It is complete with case and in good condition.....\$75

24 BRASS-CASED POCKET COMPASS, (unillustrated), English, c-1900. Measuring 2 3/8" in diameter, this fine little pocket compass has a jeweled needle, a lidded grayed-brass case and a heavy beveled crystal. It is in very good condition.....\$55

ALL PRICES INCLUDE SHIPPING AND HANDLING TO ANY DESTINATION WITHIN THE CONTINENTAL U.S.A.