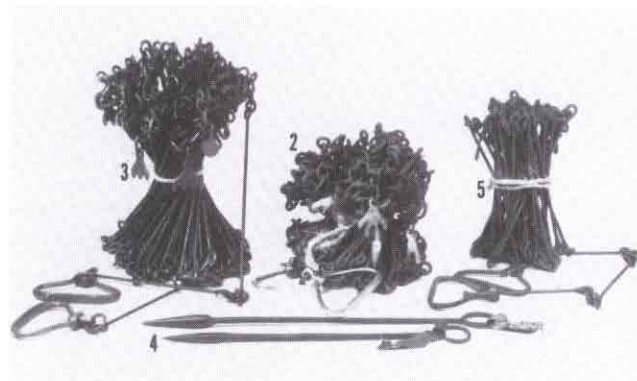


PERCEPTIONS SCIENTIFICA

*Instruments & Curiosities
of Early Science, Technology & Medicine*

WINTER 90/91

1. OHIO PATENT TRANSIT, American, signed and dated, "T.F. Randolph Cin O. Patented March 1, 92". This unusual form of transit instrument is 9" tall with a 7" long telescope and a 5 1/4" diameter horizontal circle with two inset level vials. The lower motion/leveling base is fit with later-made, and proper, opposed leveling screws and a spring-opposed tangent screw. The instrument is complete with Randolph's patented sole leather case which retains the original trade label denoting 1853 as the year of establishment of the firm. The original tripod, also in very good condition, accompanies the instrument. An unusual American patent instrument, complete and in good condition.....\$1150



2. 100 FOOT LINK CHAIN, English, signed, "Chesterman Sheffield". This chain is made from heavy stock. It is fit with brass handles and tally tags. Chesterman held important patents in England on machines associated with chain production and therefore was a prolific retailer of chains in his home country as well as America. The condition is very good.....\$325

3. 4 POLE LINK CHAIN, American, 4th quarter 19th century. This 66 foot long chain is fit with brass handles and brass tally tags. The chain was used for Government Land Office surveys in the State of Montana and is fit with the GLO-required brazed links. The chain has moderate oxidation overall.....\$325

4. 2 POLE LINK CHAIN, American, 2nd half 19th century, both handles stamped, "T.H. Ran-

dolph Cin O.". This 33 foot chain is fit with brass handles and tally tags. It is in good condition, note, moderate oxidation throughout. Signed two pole chains are very uncommon.....\$375

5. BOTTOM-WEIGHTED CHAINING PINS, American, late 19th century. These blacksmith-forged chaining pins were made to allow horizontal chaining in unusually steep areas where the pin would have to be dropped from a standing outstretched position. They are quite uncommon....\$110 pr.

6. PITTSBURGH PLANE COMPASS, mid-19th century, signed by engraved script on the silvered compass face, "James Reed & Co. No 141". This attractive early American surveyor's plane compass is 16" in length with a 7" compass housing and 6" needle. The mainplate incorporates a single level vial, an outkeeper, and a counter used to keep track of the number of chains measured. The compass is in very good condition and is complete with the original tripod and staff mount....\$795



7. 18TH CENTURY PLANE-TABLE COMPASS BY GEORGE ADAMS SENIOR, English, circa 1740-50, signed on the compass card, "Made by G. Adams in Fleet-Street, London*". This beautiful and rare form of compass measures 8 5/8" in length and has a hand graduated circle, a lathe-turned retainer ring, and a 4 1/4" needle. The fine printed compass card depicts the sun with its rays pointing to the cardinal and many sub-cardinal points. The compass is in fine condition, note a slight chip to a corner of the wooden housing.....\$1150



8. MINIATURE ENGLISH TRANSIT, early 20th century, signed, "Cooke, Troughton & Simms.". This high quality transit incorporates a 6" long telescope, 4" diameter vertical circle, 4 3/4" diameter two-vernier limb, compass with 2 1/8" needle, a standard set of 3 level vials and a 4-screw leveling base. The instrument retains 99% of the original black lacquered finish and is in very fine condition, complete with lens cover.....\$575



9. FRENCH CROSS-STAFF/SIGHTING COMPASS, late 19th century. This combination cross-staff head and compass with graduated horizontal circle is 7 1/2" tall with a 3 1/2" single vernier limb, folding sight vanes, out-board level vials, and two pair of opposed sighting slits. The instrument is in very fine condition retaining 99% of the original grayed and bright lacquer finish and complete with staff mount joint.....\$295

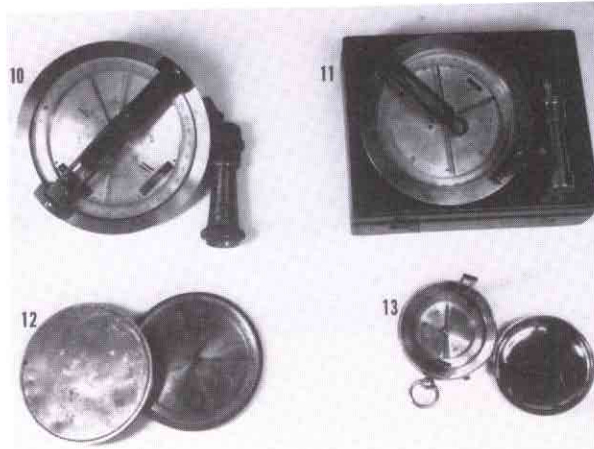
FRENCH MADE POCKET COMPASSES:

10. Late 19th century 5 1/2" in diameter with two level vials, folding sight vanes and staff mount, good condition.....\$125

11. Mid-to-late 19th century, 4 5/8" in diameter with two level vials, folding sight vanes, staff mount and case. This is an earlier example than those usually encountered.....\$175

12. Late 19th century, 3 3/4" diameter brass housed pocket compass with lid. Good condition.....\$95

13. Late 19th or early 20th century, nickel plated case with cover 2 3/4" in diameter, folding sight vanes and lid. Very good condition.....\$150





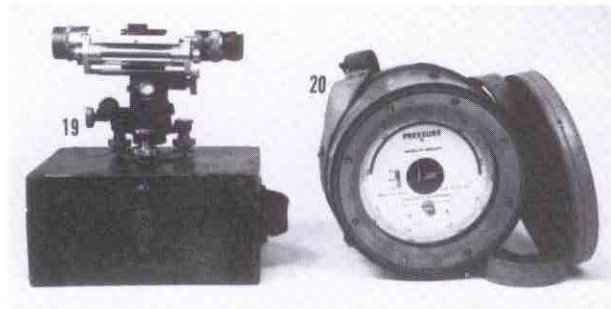
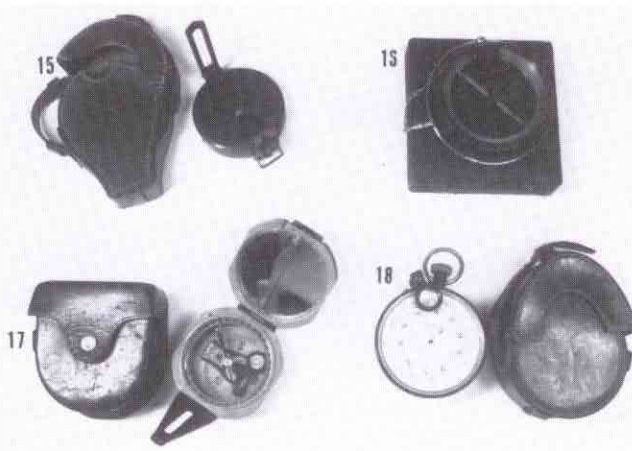
14. TROUGHTON & SIMMS LEAN DIAL MINING THEODOLITE, English, 2nd quarter 19th century, signed in script on its silvered compass face, "Troughton & Simms, London". This form of theodolite probably evolved from the late 18th century English patterned theodolite; that design of vertical arc was practical for mining application, allowing the use of the telescope for both nadir and zenith sightings. During the 2nd quarter of the 19th century, Joel Lean, a Cornish mining engineer, adapted the instrument further by adding convertible sight vanes, as well as enclosing the horizontal circle and vernier. This instrument is in good condition, retains traces of the original lacquer, and is complete with the original case. This is the earliest telescopic mining instrument we have encountered.....\$1550

15. PRISMATIC COMPASS, American, mid-late 19th century. This Hutchinson pattern compass is 2 3/4" in diameter with a single folding sight vane and fold-up prism with a swing-away cover. It is in fine condition and is complete with its velvet lined leather case.....\$225

16. MINER'S DIP-NEEDLE, French, Circa-1890. The dip needle was used primarily in exploration and prospecting for locating ore bodies under the surface of the land. This example is 3 1/4" in diameter, and fit with a suspension ring and needle arrestor connected to a chain. It retains 99% of the original gray brass finish and is complete with case.....\$175

17. BRUNTON POCKET TRANSIT, English, early 20th century, signed, "E.R. Watts & Son London". This standard size pocket transit is housed in an aluminum alloy case. It incorporates the necessary indexing for taking both vertical and horizontal readings. The instrument is complete with the leather case and is in very good condition.....\$195

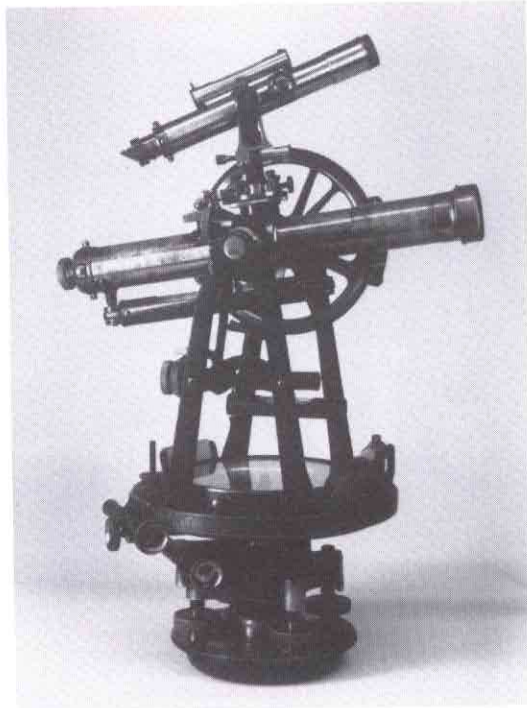
18. "SURVEYING ANERIOD" ALTIMETER BAROMETER, English, early 20th century, signed, "E.R. Watts & Son London". This instrument is 3 1/8" in diameter and reads in meters. An adjustable magnifier is used for reading the internal vernier. The instrument is in good condition and complete with the original case.....\$225



19. MINIATURE ZEISS TILTING LEVEL, German, 1st quarter 20th century, signed, "Carl Zeiss, Jena. Nr. 12574. D.R.P. D.R.G.M.". This finely made miniature level stands 5 1/2" tall with 7 3/4" long inverted image telescope, a side mounted level vial with a prismatic bubble locator and swiveling two-sided bubble illuminator, a 3-screw leveling base with attached bullseye bubble and attached viewing mirror. The telescope may be swiveled within its centrally located yoke. The instrument is most attractive with the original black, white, and nickel silver finish. The condition is very good. The original case is in good condition.....\$425

20. PRECISION BAROMETER, American, 1st half 20th century, signed, "Wallace & Tiernan Belleville, New Jersey". This fine instrument is 7 1/2" in diameter and 4 1/4" in depth. It reads-out on a mirrored scale with two graduated circles and an index indicator. It is housed in a heavy leather case. The condition is very good.....\$295

21. BUFF & BUFF SOLAR-MINING TRANSIT, American, c-1910, signed, "Buff & Buff, Boston, #6485 Pat'd Nov. 12 1900". This instrument represents the Seagmuller solar telescope in a state-of-the-art design, also used as an auxiliary telescope in mine surveys. The instrument is 16" tall with a two vernier horizontal limb, a variation setting index, and a 4 1/4" magnetic needle. The transit has a standard set of three leveling vials and on the solar attachment a single vial. The vertical circle has a set of two verniers (to assist in setting the latitude precisely) and a gradienter tangent screw. For mining application, the offset telescope allowed the use of the instrument when viewing inside steep shafts and tunnels. The instrument is in good condition and retains 50% of the original finish. The solar attachment has a nickel telescope tube and level vial, lacquered brass knobs, and a prismatic eyepiece (lacking a tiny swing-away filter) and retains 98% of the original finish. The case is complete and in fair condition with loose joints throughout. This is a rare form of convertible solar/mining instrument in very good condition.....\$2250



22. BUFF & BERGER SIMPLE TRANSIT, American, c-1883 signed, "Buff & Berger Boston, #538". This transit instrument is 12" tall with an 11" long telescope, 7 1/4" horizontal plate with two verniers (one vernier is lacking a reflecting shield) and a 4 3/8" magnetic needle. The instrument is in very good condition. The cast standards retain the green cloth finish unique to Buff & Berger and later Buff & Buff. The original case is complete with a well worn surface.....\$750



23. GURLEY EXPLORATION ALIDADE, American, 1918. This petite exploration instrument is 11" in length and incorporates an 8" long telescope with a Beaman's patent stadia arc (1906), a trough needle, bullseye bubble, and top mounted level. The instrument is in very fine condition, complete with 98% of the original finish and the original leather covered case.....\$495

24. NEW YORK PLANE COMPASS, American, mid-19th century, signed by engraved script, "E.A. Kutz, New York". This quality surveying compass measures 15 1/4" in length with a silvered and decoratively engraved compass face, a 6" needle, and opposed level vials on the mainplate. The original case has a place for the compass needle; the latter removed due to the lack of an arrestor in the compass housing. Evidence suggests that later the compass was retrofit with an arrestor to secure the needle within the compass housing. The outfit is in very good condition, complete with case, staff mount and the original tripod. A very attractive early American compass.....\$1050

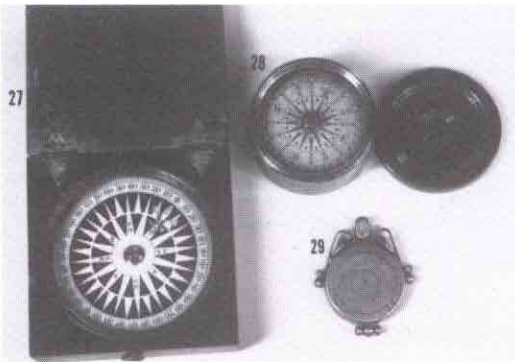
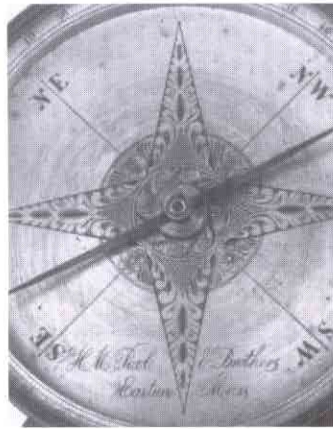




25. **CANADIAN THEODOLITE**, 4th quarter 19th century, signed, "*Chas Potter Toronto*". Standing 10" tall with an 11 1/2" telescope, this compact English-pattern theodolite incorporates a two-vernier external horizontal circle, silvered compass face with a 2 1/2" needle, old pattern directly-threaded slow motion tangent screws throughout, and a 4 screw leveling base. The instrument is complete with a fine hand dovetailed walnut case and sun shade, all in very good condition. The case carries the trade label of C. Weinmann, San Francisco. Although Charles Potter was one of Canada's more prolific manufacturers, any Canadian-made instrument is quite scarce today....\$2450



26. **MASSACHUSETTS PLAIN COMPASS**, American, probably 3rd quarter 19th century, signed by engraved script on the compass face, "*H.M Poole & Brothers, Easton Mass*". This beautifully engraved compass is 15" in length with a 6" diameter silvered and engraved compass face, two opposed level vials on the mainplate and 7 1/2" tall sight vanes (one thumb screw is lacking). The brass is darkened overall and the original case is complete but distressed. The compass face is intricately engraved with rays marking the cardinal points, and floral designs within. A very attractive early American surveyor's compass....\$950



27. **MAHOGANY CASED DRY-CARD COMPASS**, English, 1st half 19th century. The case is 3" square and contains a 2 1/2" printed card that is divided into quadrants. The glass cover is retained by a lathe-turned brass ring. The condition is very good....\$150

28. **BRASS CASED DRY-CARD COMPASS**, Late 18th or early 19th century. The lathe-turned brass case of this fine compass is 2" in diameter and has a hand divided and printed paper compass card within. This very attractive compass is in very fine condition....\$225

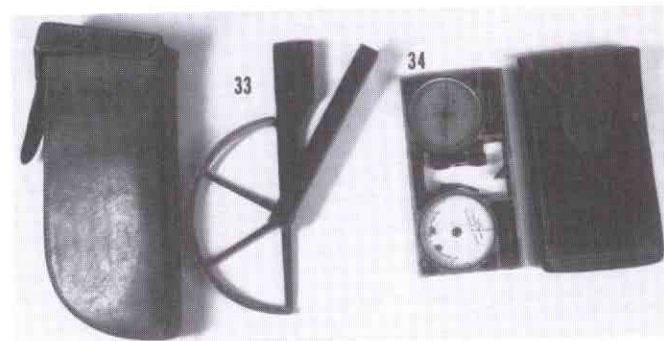
29. **SEAMAN'S COMPASS/WATCH FOB**, Continental, last half 19th century. This lovely occupational fob is silver plated and is decoratively engraved throughout, including a centralized fouled-anchor design. The opposite side contains a 1 1/8" compass. The condition is good; note overall pocket ware....\$295



30. K & E ARCHITECTS LEVEL/COMPASS, American, 1906, signed, "*Keuffel & Esser Co. New York*". This small level includes a telescope 11 1/4" in length, a housed compass with 2 7/8" needle, a horizontal circle with opposed vernier, and leveling base. The set also includes a wall trivet and points, two adjustment pins, lens cover and shade, and a later booklet on the use of the instrument. The condition is very good; the case is sound but stained....\$395

31. PHILADELPHIA PLANE COMPASS, American, late 19th, early 20th century, signed by engraved script, "*Queen & Co. Makers Phila. 5945.*". This small plane compass is 11 3/4" in length and includes a 4" long needle, opposed level vials and 5 3/4" tall sight vanes. The condition of the instrument is very fine, complete with 99% of the original finish throughout, and complete with the original case....\$595

32. BOSTON WYE LEVEL, late 2nd quarter 19th century, nicely signed, "*C.G. King, Boston*". This early American wye level is 14 1/2" in length and incorporates a 7" long barrel bubble, an early style directly-threaded slow-motion tangent screw, and a 4 screw leveling base. The top of the supporting frame is decoratively engraved with the manufacturers name and a 5 point star. The condition of this heavily-built Instrument is good. The original double door case is in fair condition....\$675



33. PENDULUM INCLINOMETER, American, early 20th century. This unusually large inclinometer is 7 3/8" long with a sighting tube that produces a split-image of the observed location as well as the curved and silvered scale. It is in very good condition and is complete with a leather covered case....\$175

34. DIETZGEN LEVEL/INCLINOMETER/COMPASS, American, late 19th or early 20th century, signed, "*Eugene Dietzgen Co., San Francisco*". This most unique combination instrument incorporates a peep sight with silvered plate to allow leveled sightings, a

graduated compass with a 1 3/4" needle, a pair of folding sight vanes, opposed level vials, and a housed circular pendulum inclinometer. The instrument is in good condition and complete with it's original case....\$325