

**MISCELLANEOUS**  
**Final as of March 19, 2006**

MI 1, **Kent Axe, Douglas Axe Co., c. 1860.**



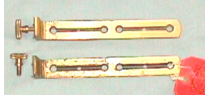
Blade is 4  $\frac{3}{4}$ " wide and head is 6  $\frac{1}{4}$ " across. The rough hand-hewn handle is 26  $\frac{1}{2}$ " long. The blade is pitted and stamping hard to read but it appears to read: Douglas Axe Mfg. Co., Cast Steel Warranted, (row of undecipherable letters), No. 3.

MI 2, **Portable Candle Lamp, no maker indicated, c. 1860.**



This lamp is steel painted black with much of the paint missing. It is 4  $\frac{1}{4}$ " tall and 2  $\frac{1}{8}$ " diameter and has two folding wire handles. There is a thick glass lens 1  $\frac{3}{4}$ " diameter on a hinged door. Inside the case is a rotating cylindrical sleeve with green and red lenses.

MI 3, **Compass Sight Vanes (2), W. & L.E. Gurley Co., Troy, NY, c. 1890's.**



MI 4, **Quarter Corner Stone, set by A.W. Keddie, U.S. Deputy Surveyor, 1871.**



This stone is 8" x 10" x 12" and weighs 70 pounds. On the front face is a 4" high scratching of  $\frac{1}{4}$ , and a red ring is painted around it. The stone originally marked the  $\frac{1}{4}$  section corner between Sections 29 and 32, T24N, R11E, MDM.

MI 5, **Bearing Tree Blaze, scribed by A.A. Smith, U.S. Deputy Surveyor, 1877.**



The size of this pine tree blaze is 12" x 37". It is scribed "T28N, R11E, S36, BT."

MI 6, **Rod Target, Unsigned, c. 1890.**

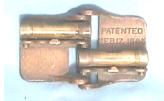
This attaches to a surveyor's leveling rod. It is made of brass with faded & dirty red & white paint.

**MI 7, Aneroid Barometer/Altimeter, Unsigned, c. 1890.**



This is a 2 1/2" diameter pocket model altimeter in working condition. It is marked Compensated, Made in England. The scales range from 0 to 12,000 feet and 20 to 31 inches mercury. The exterior is finished in a gold tone. The case is in fair condition. The features on the dial bear a striking resemblance to the dial on a similar barometer made about 1894 by Short & Mason, London. Letters, numerals, needle, etc. are almost exactly the same.

**MI 8, Folding Rod Level, W. & L.E. Gurley Co., maker, Troy, NY, c. 1890.**



This item is used to check the plumb of a leveling rod. It is of brass and hinged, and has two spirit levels. It is marked "Patented Feb. 17. 1885."

**MI 9, Portable anemometer, Keuffel & Esser Co., maker, New York, Serial No. 3156, c. 1898.**



This instrument measures air movement and was customarily used in a mine. It is 2 1/2" in diameter, and is complete with a wood case. It is catalog no. 5950. The dial has a 1,000 feet range.

**MI 10, Timber Scribe, Unsigned, c. 1900.**



This tool has an octagon wood handle and is typical of those shown in catalogs during the late 19th century.

**MI 11, Wire Cutters, Unsigned, c. 1900.**

This tool is made of iron or steel with folding handles. It was made in England and is marked 256.

**MI 12, Angle Mirror, Unsigned, c. 1900.**



This viewing tool is made of brass and has a 3" handle with a string hook in the end.

**MI 13, Timber Scribe, Buck-Hickman, maker, c. 1900.**



MI 14, **Wagon Wheel Odometer**, Lionel Corp., maker, New York, c. 1920.



This instrument is of brass construction, and measures 2¼" x 4½" and has a black leather case. The case has a tin-plated steel liner.

MI 15, **Surveyor's Seal**, unsigned, Charles E. Sloan, LS 367, c. 1901.



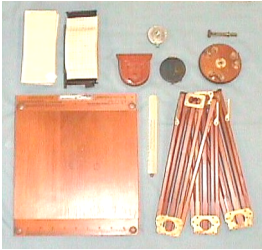
MI 16, **Folding Pocket Magnifier**, Depose, Maker, c. 1910.

MI 18, **Mining Lamp Target**, Buff & Buff Mfg. Co., maker, Boston, MA, Serial No. 7309, c. 1915.



This 13 1/2" high instrument is made principally for use in mines or dimly lit situations. It mounts on a standard tripod, and uses light from an oil lamp to illuminate a target. Milk glass is used in the target to give better diffusion. The lamp weighs 6½ pounds.

MI 20, **U.S. Army Plain Table Sketching Outfit**, Keuffel & Esser Co., maker, New York, c. 1918.



This U.S. Engineers model outfit consists of a number of topographic surveying items, all housed in a hard fiber suitcase type container. They include a plain table board (no. 2218), Eastman Kodak folding-leg tripod, pacing counter, K&E optical clinometer (#4441) with 1° graduations to 45°, white-coated triangular scale alidade, and note pads with webbed wrist strap. The board is 12½" x 15". The outfit is catalog No. 2218.

MI 21, **Heliograph**, W&J.G&B, English Military, c. 1941.

MI 22, **Pocket Celluloid Magnifying Glass**, Unsigned, c. 1920.



MI 23, **Timber Scribe**, Unsigned, c. 1920.



This tool has an octagonal wood handle with a leather thong through the handle.

MI 24, **Flashlight**, Unsigned, c. 1920.



This item has a 2" diameter lens that is 1" thick.

MI 26, **Clinometer-Compass**, A. Lietz Co., San Francisco, c. 1920.

This is Atwood's Mining Clinometer and comes with a leather case.



MI 27, **Surveyor's Seal**, unsigned, George Thomas Cline, LS 1299, c. 1922.



This is a small-sized black & brass finished desktop seal.

MI 28, **Staff Mounts for Compass**, Unsigned, c. 1930.



MI 29, **Anemometer**, Keuffel & Esser Co., NY, c. 1925.

This is the 6" diameter size and there is no case. Operation is sluggish.



MI 31, **Price's Patent Acoustic Current Meter**, W. & L.E. Gurley Co., maker, Troy, NY, Model No. 494, c. 1925.

This instrument measures stream flow by registering audible clicks every 10 revolutions. The instrument is complete rotating cups, rubber hose, earphone attachment, and accessories, all fitting in a wood wood case with a maker's label identifying it as Pattern No. 616.



MI 32, **Timber Scribe**, Unsigned, c. 1880.



This tool has a round wooden handle marked PLA.

MI 33, **Leather Putees**, Unsigned, c. 1930.

MI 34, **Artificial Horizon**, Unsigned, c. 1930.

This is Serial No. 206 and has a mercury tray. No case.

MI 35, **Brass Cap Survey Marker, City of Los Angeles, c. 1930.**

This is a cadastral type marker for the country boundary at T8-9N, R11W, S61, 6 for LA & Kern Counties.

MI 36, **Civil Engineer's Seal, James F. Flannigan, c. 1931.**



Chrome hand held seal RCE 292 for California registration as a civil engineer.

MI 37, **Brass Cap Survey Marker Bench Mark H 295, U.S. Geological Survey, c. 1932.**

MI 38, **Brass Cap Survey Marker Bench Mark U 180, USC&GS, 1934.**

MI 39, **Right Angle Prism, Unsigned, c. 1935.**



This item is 1 1/2" x 2" with a 1 1/2" stem handle. It is marked Cal Finance 106A.

MI 40, **Astro Compass, Sperti, Inc., c. 1944.**

This is a U.S. Air Force item Mk II USAF.

MI 42, **Brass Cap Paper Weight Bench Mark, U.S. Geological Survey, c. 1950.**

This is a 3 1/2" diameter polished brass cap bench mark mounted on a wood base for use as a desk paper weight.

MI 43, **Swivel Graver, Benedum Inst., c. 1950.**

This is a USGS double scribe tool used in preparing maps from aerial photographs.

MI 44, **Brass Rod Level, Surveyors Service Co., c. 1950.**



This item has black paint over brass although much of the paint is gone. It is 4 1/2" long and has a 3/4" diameter fish eye level.

MI 45, **Astro Attachment for Theodolites, Kegelman Bros., c. 1959.**

This item attaches to the objective end of theodolites for making direct pointings at the sun. It is a U.S. Army Corps of Engineers item, Serial No. 2004.

MI 46, Sliding Leg Tripod, Wild-Heerbrug Co., c. 1967.

MI 47, 4 each Glass Paper Weights of Surveying Scenes, Unsigned, c. 1980.

MI 49, Trivet for Architects Level, Unsigned, c. 1930.



MI 50, Trivet Base for Transit w/Theodolite Adapter, Keuffel & Esser Co., c. 1975.

MI 51, C Cell Flashlight, c. 1930



MI 52, Target for Leveling Rod, c. 1960



MI 53, Reflector Shades for Mining Transits, c. 1920

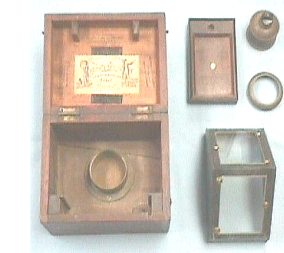


MI 54, Two-Sided Target for Leveling Rod, c. 1960



MI 55, Artificial Horizon, Stackpole & Brother, N.Y., c. 1855.

This instrument is used with a sextant when making astronomical observations on land. Mercury is first poured from the metal flask into the wooden tray. Normally an iron funnel is used but the funnel is missing from this set. The tray is then covered with the brass frame having two inclined glass windows. The cover protects against



the affect of wind. Astronomical observations are made by measuring the angle between a direct pointing on a star or other body and its reflection in the mercury. The brass frame is stamped Stackpole & Bro. U.S. Navy, and is 6 1/2" long by 3 3/4" wide by 4 1/2" high. The wood tray is 3" by 5". There is a slight localized fracture in the glass near one of the retainer screws. The wood tray has a vacant threaded hole that the missing funnel screwed into. The mercury flowed through a tunnel in the wood to the center of the tray where there is a tiny hole in the white disk. The flask contains mercury.

MI 56, **Plumb Bob Sheath**, Unsigned, c. 1975.

Leather sheath for 8 oz. bob.

MI 57, **Double Frame Sextant**, Edward Troughton, London, Serial #1466, c. 1824.

This item has double frame construction with pillars and was patented by Troughton in 1788. In 1824 he merged with Simms to form Troughton & Simms. This appears to be one of the later items produced by Troughton under his own name. It is missing the eyepiece portion of the telescope plus a few minor screws. It is lacking the case plus the auxiliary telescopes. This sextant is marked, *Troughton, London, 1466*. It is 9 1/2" high, 11 1/2" long and 4 1/4" deep. The frame is constructed of two parallel plates of sheet brass joined together by machined pillars secured with screws. There are several colored filters. The telescope is incomplete and may not be original. It now has an enlarged objective lens that was not generally used in the earlier designs. It is missing the eyepiece tube and lens that slide over the existing partial telescope. The initials R.L. are scratched into the wooden handle. It is the same brand and type of instrument used by Lt. John C. Fremont on the 1843-44 expedition.

MI 58, **Timber Scribe**, Unsigned, c. 1800.



This tool has a square wooden handle and a folding carving blade. The handle is imprinted John Smith. This variety of tool dates to the 17th century and is described on page 186 of *Hooks, Rings & Other Things, An Illustrated Index of New England Iron, 1660-1860* by Frank T. Barnes. It is at times referred to as a

Race Knife.

MI 59, **Plumb Bob Sheath, Black**, Warren-Knight, c. 1975.

MI 60, **Range Pole, 6 feet long**, Unsigned, c. 1910.

Hexagonal shape with pointed brass shoes; painted red & white.

MI 61, **Range Pole, 8 feet long**, Unsigned, c. 1910.

Hexagonal shape with pointed brass shoe; painted red & white.

MI 62, **Range Pole, 6 feet long**, Unsigned, c. 1910.

Hexagonal shape with pointed brass shoes; painted red & white.

MI 63, **Leather Spool of Plumb Bob String**, E. Ather, c. 1920.





This is a 2 3/4" diameter leather spool of plumb bob string has a brass hub. The leather sides of the spool are imprinted with a geometric pattern and the name STADRI.

MI 64, **Wood Spool of Plumb Bob String, no maker indicated, c. 1930.**

MI 65, **Tape Thermometer w/Case, H.J. Green, Westbury, NY, c. 1960**

This is a 7" long black steel clamp-on tape thermometer complete with mercury-filled glass insert. The range is -20° to +120°.



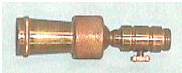
MI 66, **Tape Thermometer Case, Lufkin, No. 381, c. 1960.**

This is a 7" long chrome plated clamp-on tape thermometer lacking the mercury-filled glass insert.



MI 68 , **Brass Cap Survey Marker Bench Mark X 855 Reset, USC&GS, 1964.**

MI 69, **Staff Mount for Compass, Unsigned, c. 1950.**



MI 71, **Architect's Wye Level Printing Die, unsigned, c. 1870.**



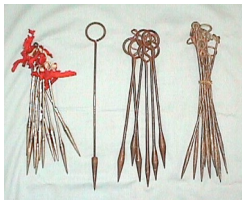
This is 1 1/2" wide by 1 1/8" high with an architects wye level on copper plate, mounted on a wood block.

MI 72, **Assortment of 68 total Chaining Pins, unsigned, c. 1850 to 1950.**



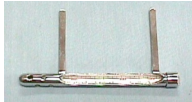
These pins are used in conjunction with measuring distance with a chain. They range in length from the 6" red & white brass pins to 16" iron & steel. Some are hand-forged iron while others are of uniform diameter steel wire.

MI 73, **Assortment of 29 total Drop Pins (Chaining), unsigned, c. 1850 to 1900.**



These are the type of weighted chaining pins that were specified for use in U.S. public lands surveys. They are weighted at the bottom so they will drop vertically when dropped for a position in the air. There are two complete sets of 11 pins, 6 of another variety, and a single example.

MI 74, **Tape Thermometer, Brandis, Brooklyn, c. 1950.**



This is a special tape correction mercury thermometer in a chrome steel case. The graduations show directly the correction necessary for varying degrees of temperature using 68° as standard. Condition appears unused.

MI 75, **Aneroid Mining Barometer/Altimeter, Taylor Instrument Companies, Rochester NY, c. 1912.**



This is a 3" diameter pocket model altimeter. It is marked Compensated for Temperature, E.D. No. 3297. The E.D. reference is likely Eugene Dietzgen Co. There are 3 scales, (1) inches of mercury, (2) feet, and (3) meters. The elevation scale ranges from -1000 to +6000 feet. The exterior is finished in a black paint. The back of the case is scratched O.B. Brown, Quincy, Calif. Taylor first started business in 1851 and the Taylor Instrument Company was formed in 1902.

MI 76, **Timber Scribe**, Lutz File & Tool Co., c. 1960.



This tool is 7 1/2" long and has a round wood handle. The blade is engraved Brown. This tool was made by Lutz File & Tool Co., Cincinnati, OH, and handled by the A. Lietz Co. as their catalog 8268-90.

MI 77, **Bearing Tree Blaze**, scribed by Arthur Keddie, U.S. Deputy Surveyor, 1872.



The size of this pine tree blaze is 4 1/2" x 47". It is scribed "S T23N, R8E, B" On the reverse side Orville wrote that it was the corner to sections 4, 5, 32, 33. It has a chopped hack mark approximately 12" from the bottom.

MI 78, **Pocket Stereoscope**, Maker unknown, c. 1960.



This is a folding pocket stereoscope 2 1/2" x 5" and very lightweight. It is in a plastic case and has seen much field use.



MI 79, **Colonial Surveyor plate**, Onondago Pottery - Syracuse China, c. 1929.

This is a 10" china plate with a picture of a colonial surveyor holding a Jacob's staff in one hand and a surveyors compass in the other held close to his body.

MI 80, **Quarter Section Corner Post**, n.d.

Size is 3 1/4" x 3 1/2" x 23", scribed S 27 and S 28.

MI 81, **Section Corner Post**, n.d.

From Tahoe National Forest.

MI 82, **Cross Staff Head**, n.d., probably either French or Italian

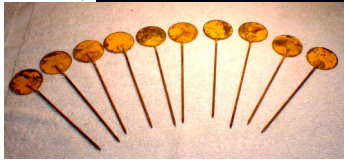


Brass octagonal construction with wooden case and supporting column that screws into bottom of instrument. Both case and instrument are marked "frdo" or "freo". The head is 2.7" long and 2.1" wide. When assembled with the staff support the total length is 5.2". When not assembled the staff support screws inside the sighting head.

MI 83, **Bearing Tree Blaze Overgrowth**, n.d., Unknown, c. 1870

The size of this blaze is 5" x 25" and the scribing is reversed. S. XXXIV, T XXV N, R X E.

MI 84, **Chaining Pins – set of 10**, n.d., unsigned, c. 1890



This set of pins have a solid disc top painted yellow. They came from an estate auction in Paoli, Indiana.



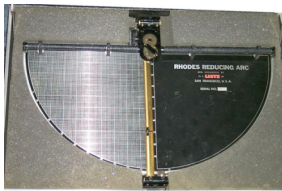
MI 85, **Timber Scribe**, Unsigned, c. 1900

This tool appears handmade and is 6 1/2" long.



MI 86, **Tape Thermometer w/Case**, H.J. Green, Brooklyn, NY, c. 1955

This is a 7" long black steel clamp-on tape thermometer complete with mercury-filled glass insert. The range is -5° to +135°. The glass thermometer is numbered 61403A. The thermometer recently fell on the floor and broke.



MI 87, **Rhodes Reducing Arc**, The A. Lietz Co., San Francisco, CA, S/N 21129, c. 1945

This instrument is used in cross section work in combination with a special rod, not included. It utilizes the slope distance and its special graph to determine horizontal and vertical distances without mathematical calculations. The width of the instrument is 20 3/4 inches. The original foam lined case is included.

MI 88, **Folding Rule, 6 Ft.**, Eugene Dietzgen Co., Chicago & N.Y., c. 1960

This tool has folding sections of 7 ½” long and totals 6 feet when fully extended. It is made of wood painted white with black graduations and markings. It came with the K&E twisted standards transit TR 32.

MI 89, **Rule Target**, Keuffel & Esser Co., No. 7960, c. 1960

This tool is designed to attach to a wooden folding rule such as MI 88 and came with that item. It is 3” in diameter and marked as a conventional rod target painted red and white in quadrants, with 1/8” graduations. There is a brass clamp mechanism for attaching to a rule. It is marked Patent Pending, Des Pat 179,838.

MI 93, **Aneroid Barometer/Altimeter**, Andrew J. Lloyd Co., Boston, c. 1890.



This barometer has a range of 17.2 inches of mercury to 31 inches. The altimeter range is divided from 0 to 16,000 feet. It is marked “Andrew J. Lloyd Co., Boston, Compensated for Temperature.” Size is 3 inches diameter by 1 3/8 inches thick. Lloyd reportedly produced this aneroid in his shop although in later years imported them from England.

MI 94, **Pocket Sextant**, Unmarked, c. 1856.



This is a conventional pocket sextant of the type invented in the late 18<sup>th</sup> century. It is complete except for missing the telescope. Despite being unmarked, the seller represented it as a product of the W. & L.E. Gurley Co. That representation is accepted here as probably correct.

The pocket sextant tool was invented in the late 1700’s by William Jones in London and first described in *Geometrical and Graphical Essays*, 2<sup>nd</sup> Ed., 1797, first written by George Adams and enlarged in the second edition by Jones. It performs the same basic angle-measuring operations as the more common navigator’s sextant although it is much smaller and therefore more convenient for exploratory surveying. It can also be used for making astronomical observations when used with an artificial horizon. A particular advantage it has in surveying work over a navigator’s sextant is the shielding afforded by the protective casing. Its downside as a land measuring tool is the difficulty in measuring horizontal angles between distant points that have significantly different heights.

MI 95, **Plane Table Board**, Keuffel & Esser Co., New York, c. 1930



This board is marked as K&E Catalog No. 5197B. The dimensions are 18” x 24” and it is fitted for a Johnson Head tripod. It is fitted with eight knurled head clamp screws for attaching the paper. There are some light scratches and pinhole indentations in the surface.

MI 96, **Wagon Wheel Odometer**, Keuffel & Esser Co., New York, c. 1900.



The mechanism is of brass construction, and measures 2¼" x 4½" and has a worn leather case. The case has a tin-plated steel liner. The tool is imprinted with the company name as is the leather case. These items appear in K&E catalogs of 1887 to 1921 but not in the 1875 catalog. The catalog pictures differ from this example somewhat in the construction of the divided rotating wheel. None were seen to match this example. It is catalog number 6910 in the 1895 K&E catalog.

**MI 97, Brass Rod Level, A. Lietz Co., San Francisco, c. 1915**



This tool is 3¼ inches long with two tubular spirit levels. It has a key slot that enables it to be fastened to a rod by means of a screw. It is catalog No. 190 in the 1911-12 Lietz catalog. It is imprinted A. Lietz Co. San Francisco.

**MI 98, Aneroid Barometer, Negretti & Zambra, London, s/n 707, c. 1864.**



This is a 4 3/4" diameter by 2 ¼" thick aneroid barometer in non-working condition. In addition to the maker's name and city, it is marked Compensated. There is no altitude scale for linear measure (feet). The pressure scale ranges from 23 to 31 inches of mercury. The exterior is finished in a medium patina brass. Enrico (Henry) Negretti and Joseph Zambra were Italians who formed the partnership of Negretti & Zambra in London in 1850 as philosophical instrument makers and became the most prolific and leading makers of meteorological instruments during the second half of the nineteenth century.

**MI 99, Aneroid Barometer, Negretti & Zambra, London, s/n 347, c. 1862.**



This is a 2 1/2" diameter by 1 3/16" thick aneroid barometer produced after the expiration of the 1844 Vidie patent. The needle responds to changes in air pressure but cannot be accurately set by the screw on the back. It is signed with the maker's name and city plus engraved with generic atmospheric conditions such as Stormy, Rain, etc. There is no altitude scale for linear measure (feet), nor is it marked Compensated. Negretti & Zambra had produced an aneroid the size of a pocket watch by 1861, and compensated aneroids seem to have first appeared in the early 1860's. The pressure scale ranges from 24 to 31 inches of mercury plus extension graduations. The exterior is finished in a medium patina brass. Enrico (Henry) Negretti and Joseph Zambra were Italians who formed the partnership of Negretti & Zambra in London in 1850 as philosophical instrument makers and became the most prolific and leading makers of meteorological instruments during the second half of the nineteenth century.

The 1844 Vidie patent was not taken out in his own name, but in the name of Peter or Pierre Armand, Lecomte de Fontainemoreau, London. It was British patent 10,157. There was French patent 12,473 and in 1846, US patent 4702. In 1846 a German named Schinz took out Prussian patent no. 3 of 1849 for a Bourdon type device (French patent 4408), the same construction as was patented by Bourdon on June 18, 1849. Charles Cowper patented a similar device (British Patent 12,889 of 1849). Vidie sued Bourdon for infringement, and lost the case

on March 19, 1852. He also lost on appeal in 1852 and 1853. But in 1858, he won an award of 25,000 francs through the efforts of a brilliant advocate named Senard. This amount was reduced in 1861 to 10,000 francs. Vidie's patent had expired by 1861, and a renewal was refused. On July 28, 1845 Vidie took out another French patent in his own name (No. 1149).

This is one of the small size aneroids discussed in the 1864 publication "A Treatise on Meteorological Instruments" by Negretti & Zambra. It is described there as: "The patent for the Aneroid having expired, Admiral FitsRoy urged upon Messrs. Negretti & Zambra the desirability of reducing the size at which it had hitherto been made, as well as of improving its mechanical arrangement, and compensation for temperature. They accordingly engaged skillful workmen, who, under their directions, and at their expense, by a great amount of labour and experiment, succeeded in reducing the dimensions to two inches in diameter, and an inch and a quarter thick."

An aneroid barometer was used in 1855 in California by the State Surveyor General George H. Goddard for taking altitude measurements while making wagon road surveys across the Sierra Nevada.

**MI 100, Heliotrope, Maker not indicated, American, c. 1890**



This type of device is used in second and third-order geodetic surveying for reflecting the Sun's rays to a distant point, thus providing a target for long-distance theodolite observations. A single adjustable 3-inch mirror is mounted inside the case and situated so that a beam of sunlight may be aligned through the two similarly mounted aiming vanes and directed to a distant target. The case itself is part of the instrument, and is attached to an observing stand through a center hole with a metal knob with screw shaft. A separate 4-inch mirror in an adjustable mounting also has a screw shaft and is used to direct sunlight to the aiming mirror, such as when the sun's position is located behind the aiming mirror. A hand drill is included for starting holes for the reflecting mirror. The rustic painted wood case is 24½ inches by 5¼ inches and has two latches. One extra 4-inch mirror (broken) and two extra aiming sights from a different unit are included. The mirror holders and aiming sights are all made of brass painted black. Heliotropes used in first order triangulation generally were fitted with telescopes to accommodate the longer lines, while those for second or third-order were not so equipped. Heliotropes came into use by the U.S. Coast Survey during the 1840's and were regularly used until the beginning of the 20<sup>th</sup> century when electric lights became standard. Thereafter they were infrequently used for daytime observations. Their use is detailed in *Manual of Geodetic Triangulation*, USC&GS Special Publication 247 by F.R. Gossett.

**MI 101, Chaining Pins, Maker not indicated, c. 1900**



These pins are used in conjunction with measuring distance with a chain. They are steel and 14 inches in length. Some of the rings have remnants of red paint. There is a wire holder that appears hand made.

**MI 102, Egyptian Coin, Ancient Surveyors, 1998.**



This is a one-pound coin of .7200 silver portraying ancient Egyptian surveyors in line supporting a measuring cord. The mintage of the coin is reported to be 1,000.

MI 103, **Bearing Tree Blaze**, scribed by **Charles Holcomb, U.S. Deputy Surveyor, 1882.**



The size of this Douglas Fir blaze is 6" x 27". It is scribed "T18N, R5E, S30." Some errors were made in the scribing suggesting other numbers but the one shown is correct. It marked a corner on the township line between 4E and 5E, and has both numbers. It is mounted on a varnished wood backing.

MI 104, **Railroad Surveyor plate**, **Union Pacific Railroad Co., No. 417 of 2,000, c. 1993.**



This is a 9¼" employee incentive plate with a picture of former U.P.R.R. Chief Engineer G.M. Dodge together with a wye level and background scene of an 1860's survey camp and bison. The scene location is below Castle Rock on the Platte River. The artist was M. Cliukivelli (sp?). The plate is by Bergmann Incentives, 1408 Harney St., Omaha, NE (402)-342-2611.