4/80

TWIN CITY ANCIENT COIN CLUB

Bob Stumm, Pres. Whitney Lindwall, Treas. APRIL 1980
Tom Beniak, Vice Pres. Bea Lindwall, Secretary

The April meeting will be held on Thursday, April 24, 1980 at the St. Paul Jewish Community Center, 1375 St. Paul Ave., St. Paul. Your presence at the March meeting was much appreciated. We enjoyed a most happy reunion with Otto Schaden. His presentation including slides of the pyramids of ancient Egypt evoked a lively discussion. Another program with slides is coming this month.

AGENDA

7:30-8:00 Coin trading, social and coffee time, business time
8:00 Tom Beniak will give a slide presentation: an ancient seaport of Rome called O s t i a. Come with us to Italy.
9:00 Coin auction

Here is an article published in March of 1967 publication, "The Voice of the Turtle." C. W. Behnen wrote: "CLOSE-UP PHOTOGRAPHY APPLIED TO ANCIENT COINS:"

"Since no two ancient coins are exactly alike, a photograph of one is like a fingerprint. A good photograph will show striking cracks, wear, corrosion, off-center strike and other good or bad features. Photographs of your collection of ancient coins provide you with convenient records for insurance purposes or for identifying them if stolen, and for comparison when purchasing a new specimen for your collection. You can upgrade a particular specimen without removing it from the vault for comparison.

"There are many different methods of photographing coins; I shall explain the method I have used successfully. Here is a list of essential equipment for this method of photographing ancient coins.

a) A 35mm single-lens reflex camera.
b) A long-focus lens (85-135mm or longer).
c) Extension rings totaling a least 50mm length.
d) A yellow filter for B&W film (Wratten K-2).
e) A firm support; a tripod of photo-copy stand.
f) A cable release for the shutter.
g) An exposure meter.
h) Two shaded lamps.
i) High-contrast film (Kodak Panatomic-X or Adox KB-14).

"I use a Practica FX-2 35mm camera, 50mm of extension rings, and a 105mm lens (in close-up photography, the longer the focal length of the lens, the greater the depth-of field). The extension rings introduce an exposure problem I will show how to solve later. A photocopy stand is easiest to use, but any tripod can be used. A crank-type, center-post tripod is the best type because it facilitates easy up-and-down adjustments. The best film to use is Kodak Pan-X because of its high-contrast and fine grain qualities. Almost any slow-speed film (ASA 10-40) is adequate.

"Since most ancient bronzes are dark, dull, and have few highlights, good contrast is a must for good photographs. Even overexposing the film a little will help increase the contrast. When photographing Greek Imperial bronzes, Roman sestertii, or any other ancient or medieval coins having a dull surface due to patina, wear, or soil encrustation, I suggest that a yellow filter such as a Wratten K-2 filter be used to further increase the contrast. Filters decrease the amount of light reaching the film; this must be compensated for when calculating the exposure. Figure this compensation factor after everything else is figured. If a filter has an exposure factor of 8, decrease the shutter speed to 1/8th of the original setting or open the aperature by 3 f/stops. If the factor is 4, divide the original shutter speed by 4, or open the aperature 2 f/stops.

"The shutter speed is likely to be less than 1/10th sec.; therefore, you should use a cable release to avoid jarring the camera during the exposure.

"The lighting arrangement I use is very simple. I set up two goose-neck desk lamps; one on each side almost above the coins at a height of about 12 inches. I use a 100 watt bulb in one lamp and a 60 watt bulb in the other one. This is done purposely to introduce a bit of shadow and highlights.

"Make sure the film plane and the surface on which you place the coins are parallel. If they are not parallel, distortion and out-of-focus photos will result.

"Because ancient coins are relatively small objects, you must photo them closer than the regular minimum focusing distance of the camera. Use extension rings. A set of them totaling 50-60mm will cost $5 or $6. Using them causes an exposure problem. There is a simple formula for calculating the effective f/stop (aperture).

$$\text{eff.f/stop} == \frac{(\text{f/stop indicated on lens}) \times (\text{lens-to-film distance})}{(\text{focal length of lens})}$$

Example to help explain formula: $x == \frac{(f/11) \times (105\text{mm lens} + 64\text{mm of rings})}{(105\text{mm lens})}$

$$X == \frac{11 \times 169}{105} == f/17.7$$

"This effective f/stop is the one that should be used when taking a meter reading for the exposure. Remember to compensate for the filter (if used) after you have taken this reading. If the meter reading was f/17 at 1/40 sec., the filter factor of 8 would increase the exposure time to 1/5 sec.

"After you have your set-up, shoot a test roll of film using various coins such as a billon tetradachm, a silver denarius, a sestertius and a Greek bronze. Include along with the coins a card showing what each particular exposure is, i.e., f/stop, shutter speed, filter.

"Finally, here are a few hints about systemizing the phographs of your collection: a)Photograph each denomination as a group, i.e., denarii, sestertii, Greek bronzes, antoninianii, etc.

b) Photograph 3 to 5 coins at a time. c) Photograph the obverse of the coins, turn over the coins leaving them in the same position and photograph the reverse. d) Secure the two corresponding photos with gelatin dry-mount tissue; it can be obtained in any photo store.

e) Number each coin on the photo corresponding to the catalog of your collection, if you have cataloged them."

Dea Lindwall, Secretary