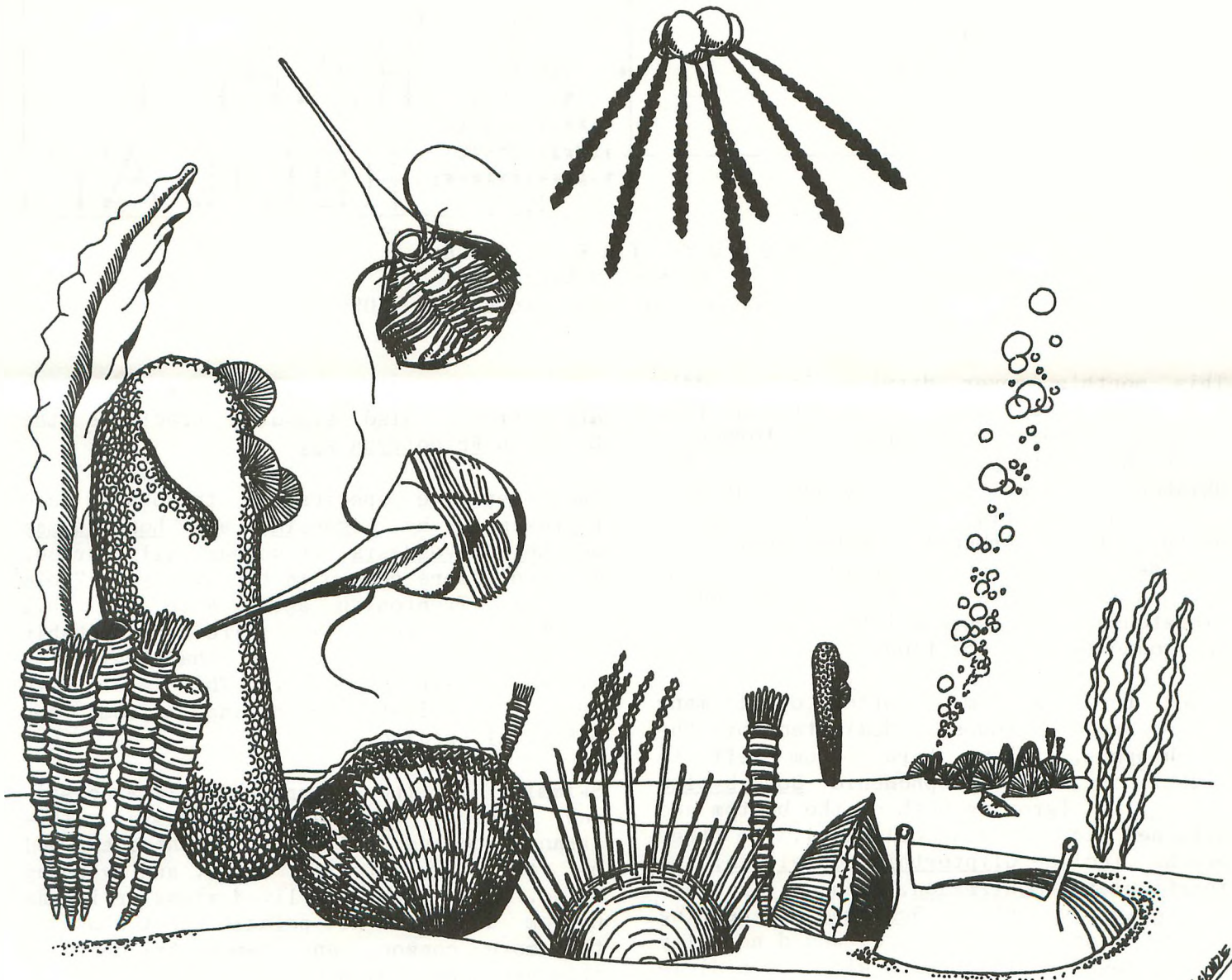


M.A.P.S. *Digest*

Official Publication of
Mid-America Paleontology Society

Volume 11 Number 9
December, 1988



MARK YOUR CALENDARS

<p>3 DEC MAPS MEETING at Fryxell Museum, Augustana College, Rock Island, IL</p> <p>1:00 Board Meeting 2:00 MAPS Meeting Dr. Merrill Foster Bradley U.</p>	<p>1989 APRIL 14, 15, 16--EXPO XI--MAMMALS Macomb, IL</p> <p>Keynote Speaker: Pete Larson Blackwood Fossils</p>
<p>14 JAN MAPS MEETING at Fryxell Museum, Augustana College, Rock Island, IL</p> <p>1:00 Board Meeting 2:00 MAPS Meeting John Catalani Woodridge, IL</p>	<pre> * * * * * * * * * * i * * * i*i * i%#i * i**i**i H A P P Y i%#%#%#i i**i***i**i i%#%#%#%#%#i i*****i*****i H O L I D A Y </pre>

ABOUT THE COVER

by Mark McKinzie
1050 N. County Line Rd., Yukon, OK 73099

This month's cover drawing is a middle Ordovician sea scape reconstructed from fossils from the Bromide formation (Simpson Group) of south-central Oklahoma. Good fossiliferous outcrops occur in the Criner Hills area and in the north-eastern Arbuckle Mountains. The Bromide formation consists of an alternating series of shales and marly limestones representing various environments of deposition.

Along the limey mud bottom dwell many invertebrate groups, dominated by the brachiopods. Shown here (from left to right) are the strophomenid Sowerbyella variabilis (growing both on the bottom and attached to bryozoan colonies); the other brachs include Glyptorthis costellata, the inarticulate Schizmadon, and on its side, Oxoplecia gouldi. Schizmadon, bearing spines along its commisure, would normally be burrowed out of site with its pedicle exposed at the surface.

Growing upright out of the substrate, and attached to various brach valves is the conularid Conulites flexuosus. This small, cone-shaped fossil is presently

treated as a cnidarian of uncertain affinities. Also standing erect is the bryozoan Eridotrypa sp.

Two separate species of trilobites are represented by Vogdesia, and Lonchodamas megehei. Vogdesia, shown partially buried, is much more common in the overlying Viola ls of Trentonian age. Note the tall eyestalks. In real life it probably burrowed to a level so that only its eyestalks were showing. This would have been excellent camouflage from any potential predators.

Swimming in the waters above is a dorsal, and ventral view of Lonchodamas. This strange-looking trilobite is characterized by its long anterior spine, and by being blind. It probably lived along or in the bottom and was not pelagic. Not shown is the more common, and famous trilobite of this area, Homotelus bromidensis.

Normally an inhabitant of deeper waters, a Diplograptus augustifolius graptolite colony floats overhead. Also shown are numerous strands of seaweed gently waving in the currents.

EXPO XI--MAMMALS

Are you making your plans for EXPO XI? Madelyne Lillybeck reports that the keynote speaker for EXPO will be Pete Larson from Blackwood Fossils. More detailed information about reservations, accommodations, etc., will follow in the January Digest.

**DUES ARE DUE
CHANGE IN MEMBERSHIP YEAR**

Over the years membership in MAPS has soared to a point where we feel it is necessary to change the way the membership year is set up. The main reason for doing so is to ease the workload of those involved in locating and mailing Digests that were not received because of late payment of dues.

So beginning now the membership year for all new members will run for one year from the month they pay their dues. They will receive a directory but no back Digests. The membership year for all current members will continue to end in December unless the membership lapses and the member rejoins.

All members will have a two-month grace period during which they can pay late dues and will still receive the Digest without interruption; e.g., members whose dues are due in December will have a grace period extending to mid-February when the March Digest is mailed. If dues are not paid by that time, however, membership will lapse, and any Digests missed because of the lapse will not be sent. If a member pays after a lapse he/she will have a new due date.

(Back regular Digests may be available at a charge, and EXPO Digests are available for a couple of years at a current price of \$9.50.)

You can check your dues status on your label. The number above your name is the due date. Beginning next month, the year will be listed first, followed by the month as a two-digit number. We'll be adding a sticker to let you know if you are overdue.

In case of any discrepancies, please contact the Treasurer.

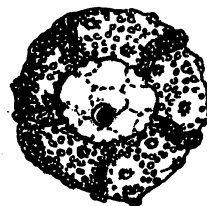
COVER QUESTION ANSWERED

Mark McKinzie, Yukon, OK, sent his apologies to Denny Sutherland, and all the other echinoid experts who caught his error in the identification of the echinoid pictured on the cover of the October, 1988, Digest. He agreed that it is indeed a Phymosoma.

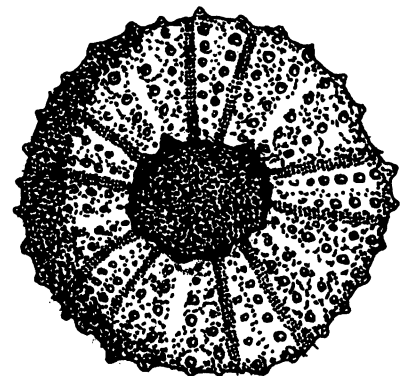
Tom and Rosemary Akers, Spring, TX, shed further light on the identification. Tom writes: "The drawing certainly appears to be Phymosoma texanum (Roemer) 1852 rather than Salenia texana Credner 1875. A quick comparison can be made of Carlos Bazan's Salenia texana on the cover of the January, 1986, MAPS Digest, which shows the correct number of rows of tubercles, the apical system which includes the suranal plate and the acentric periproct.

"The October, 1988, cover drawing shows a fossil with the correct number of rows of tubercles in the interamb for a Phymosoma and the typical blank area where the apical system has been lost. The tubercles of the October, 1988, specimen appear to be imperforate, which separates it from the very similar Tetragramma genus.

"Our opinion comes from our preparation and writing the Paleontological Society of Houston Gem and Mineral Society's Publication No. 3 'Texas Cretaceous Echinoids.' We are enclosing drawings of ...specimens of Salenia texanum and Phymosoma texanum as examples."



x1 our specimen
Salenia texana



x1
Phymosoma texanum

MICROFOSSILS III--PROTECTION, RETENTION, AND DISPLAY

by Harold Tichenor

Chicago, IL

(This is the third of a four-part series.)

Let's assume for the moment that you've pulled out some tiny little beauties, held in a small jar or box. What will you do with them? You can't display them at the next EXPO, nor to a friend at home, without selecting each one, and how are you going to keep from losing some each time you handle them.

Perhaps you know of a local rockhound club which goes in for minerals as well as other things: they may well have a M/M (micro mount) group or individual concerned with mineral crystals. Join 'em for a while at least (unless you can convert them to fossils) to learn their techniques. Or read below and put it into practice.

Micromounting, as it's practiced by its devotees, is a good means of dealing with small stuff: it keeps a small specimen in a small space (less than a cubic inch), oriented for best viewing, with details of identity, location, geology, file record, and anything else you wish to show, and is protected from loss, air-borne dirt, oxidations, and whatever.

YOU'LL NEED:

-Magnification, as discussed previously.
-Plastic boxes with covers, about 7/8 x 7/8 x 3/4 inches deep, black paper liners (preferable to painting the inside), and labels. Write to Althor Products, 496 Danbury Road, Wilton, CT 06897, for a current catalog and price list. As of 1/1/88 the prices are as follows:

	<u>100</u>	<u>1000</u>
Boxes #P-1	\$16.00	\$2.00
Liners 7/8 x 7/8	2.00	15.00
Labels 7/8 square	2.25	15.50

Nominal charge per order and transportation charges are detailed. Unless you're very young, or have more time to mount these things than I have, I suggest that you not order 1.000...unless you're splitting the lot with someone else--a common practice.

NOTE: Don't mix boxes from different manufacturers; they aren't sized identically. I have quite a collection of different sizes. And it's appropriate to mention here that Althor was recommended as cheapest by an outstanding M/M group.

Back to our list:

- Bent tweezer (about the end 1/2 inch bent to reach offset.
- Pedestal material, to raise the specimen from the box bottom: toothpicks (round), and 1/8" dowel; perhaps a little 1/4" also.
- Flat black paint, such as Testor #1149.
- Flat white paint, such as Testor #1168.
- Thinner, such as Testor #1148.

-1 or 2 small paint brushes to paint pedestal, etc.

-Mineral spirits to clean brushes, followed by washing with soap and water.

-Kleenex, for obvious reasons.

-Black drawing ink such a Higgins non-waterproof, or you'll be sorry.

-"Crow Quill" pen nibs, from artist supply house.

-Holder for the Crow Quills.

-Alcohol, denatured, not potable, to clean Crow Quills.

-Drill bits, about 0.100" and 0.125" to drill boxes for pedestals.

-3 x 5 file cards for your Micro file.

-File box, ditto.

-Cabinet for your M/M collection, to hold the boxes. I use a 30-drawer cabinet 10 x 14 x 6" deep; drawers 2-5/8 x 5-1/8 x 1". A drawer holds 10 boxes, plus 5 more if sturdy specimens can be placed on their sides.

-Krylon plastic spray #1311 Matte finish (optional).

-Cement to hold pedestal in box, e.g. Elmer's Contact Cement or Scotch Super Strength Adhesive, also to hold bulky specimens to pedestals.

-Adhesive to hold mini specimens: Yellow Dextrin powder with ~~10%~~ to ~~20%~~ by volume Gum Tragacanth powder, both from a drug store, possibly only an old one (the dextrin was once as infant food).

-Fine sandpaper to dress pedestal ends to 90 or other angle.

Razor blades (single edge) to cut toothpicks, etc., etc.

-Toothbrush holder to hold Crow Quill in holder; plastic sponge in each end for the quill--and don't drop them.

-Drilling template; instructions included.

-Display Carousel: sketches and info included.

-If not at hand, beg, borrow or steal a Dremel hand tool with a thin (.005') saw blade and other handy helpers.

-Odds & ends, or improvise; spring clips to hold painted drying pedestals, and you name it. A 1/4" paper punch will give you some nice circles from liner borders in case you want to mount many tinies as 1 specimen.

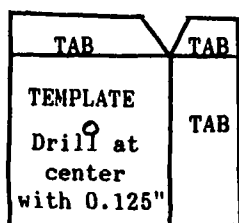
GENERAL PLAN:

A specimen, on a pedestal of appropriate length, painted black, is to be fastened in a box (experience has proved that anything short of a drilled hole and cement through the box is temporary). Further, the box label must provide all pertinent information, and the top and box must be united by the common catalog number. Completed boxes must be stored in a file, by cataloged number.

THE BOX:

Remove the top, using a sharp knife blade in the space between box and top if necessary. Use a nail file with 1 or 2 strokes on each of the four top edges of the box; scrape the four inside edges of the top with a sharp knife blade. If necessary, repeat to ease the fit. Fold a liner loosely and insert in the box. Tamp down the four sides to set the fold. (I use the end of a metal folding ruler).

The painted pedestal, with or without the specimen mounted, is compared with drill bits to select one only slightly larger. Using the template you have made from tin can stock, drill through box and liner; clean away the excess plastic which will pile up around the drill. Put the painted pedestal through the hole, using the bent tweezers just below the specimen if mounted. Apply cement around the pedestal where it is outside the box. Turn the box over and put it down on a flat surface with a thin pad under the specimen if present. Leave to dry/set.



Bend all tabs down 90. Solder corner.



Put a label on the box top, and mark it with catalog number, etc, using the Crow Quill. Dry the pen on Kleenex, then clean it with Kleenex moistened with alcohol. Put the holder in its case.

When the pedestal cement has set use the thin saw blade to cut off excess below the box. Trim if necessary with razor blade or cutting disk.

On what will be the top/front of the box (depending on the specimen's orientation) put a dot of white paint at the center of the lower edge for positioning in viewing. Turn the box 90 vertically and put a stripe of white on the bottom adjacent to dot for the catalog number.

CATALOG NUMBER:

You should have a record of every specimen, by number, on the bottom of the box, and on the top label, and on the file card (upper left, to be filed by this number in sequence).

Your numbering system is your own, but it should be flexible enough to eliminate the necessity for renumbering (mine isn't). This is it:

- 1st digit(s) Highest category, e.g. Arthropoda (8) vs Echinodermata (9)
- 2nd digit(s) Next higher category, e.g. Agnostida (0) vs Ostracoda (8)

3rd digit(s) Sequence within that second digit--so I've just assigned seq #43 among Phacopid trilobites

If I were renumbering (too old for that) I'd go to something like:

- 2nd group Phylum plus genus, e.g. 0109 to 0099, to 0999 &/
- 3rd group Portion of the whole, e.g. cephalon & part, as eye vs free cheek &/
- 4th group Sequence number within the group

It's complicated, and would require constant reference to definitions and last-number lists, but if you have pet categories, such as hypostomes or eyes, this would separate them.

Whatever your system, the catalog card for a specimen should be prepared before any mounting steps are taken.

When the painted white stripe on the box bottom is quite dry and hard, write the catalog number with the Crow Quill and drawing ink.

If not done previously, write the catalog number at the top of the label, plus any other data.

When the ink on the stripe and on the label has dried, brush a light coat of the clear nail polish on the stripe.

Then, with the ink on the label dry, it can be sprayed with one quick squirt of Krylon. While this is optional, I now use it on all new labels. This completes the mounting of the specimen. It should be stored in the appropriate drawer of the cabinet.

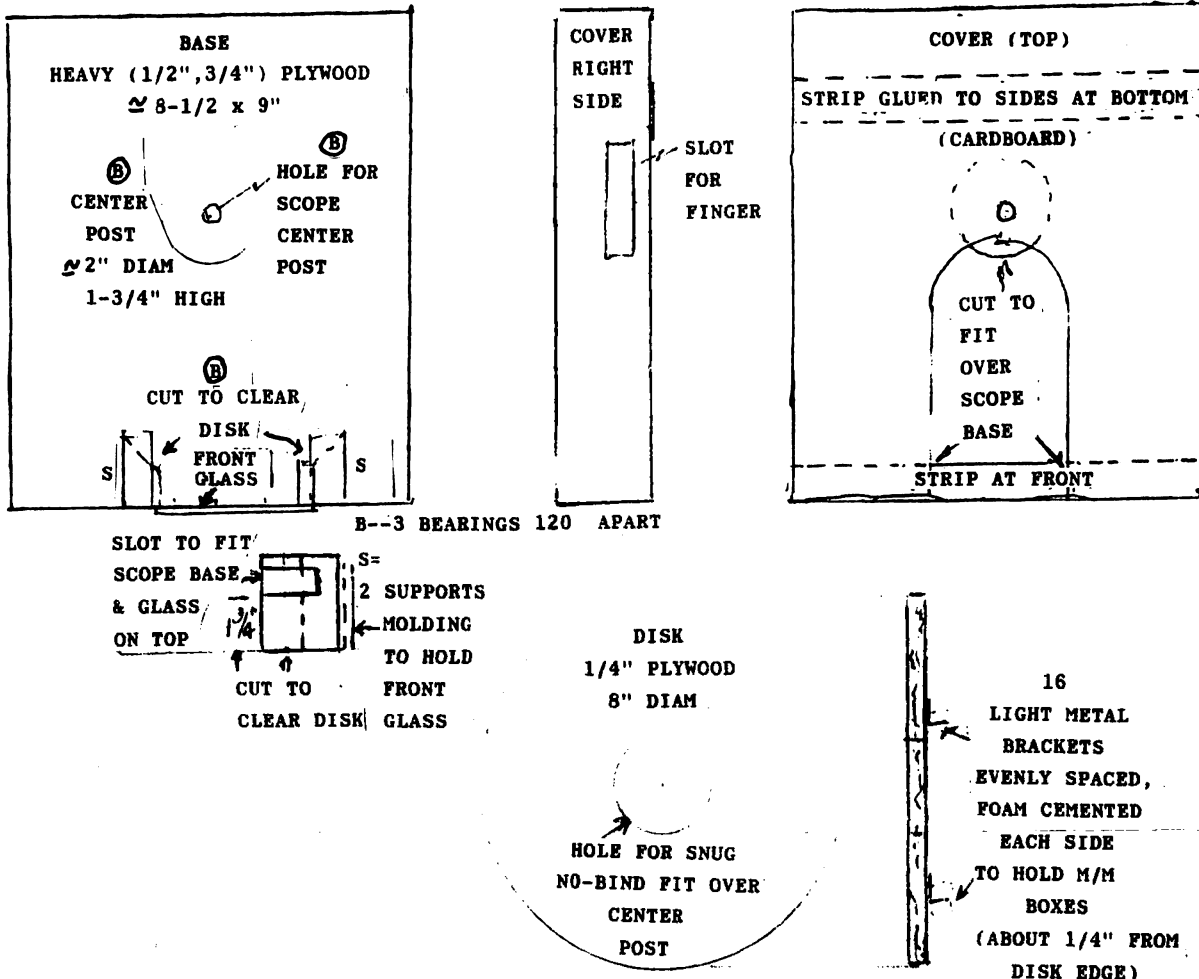
DISPLAY:

Something over 25 years ago I did a lot of noodling and more cutting fitting (and it's never stopped) to produce current status of my display facilities--the latest, in 1988, variable lighting.

The scope is old and unsophisticated enough that probably few can duplicate this hodge-podge. It is one-eyed, magnification approaching 20, a center post for focus which extends down through the base (a key element), and greater than standard size tube diameter (which I gimmicked down to standard, to take a standard microscope eyepiece of 4(?) power).

The base has four features: a 2" diameter center post drilled (app. 3/8") for the scope center post; tight fit: the whole mess can be lifted by the scope; three bearings, of which 2 are scrap ball bearings and the third is a wheel and axle from an HO RR truck; two front supports which take the front legs of the u-shaped base, 1-3/4" above the base (same as the center post height on the base).

M / M CAROUSEL
(NOT TO SCALE)
(All Painted Flat Black)



THE DISKS:

I suggest two of them for easy change of program--plywood cut to a circle approx. 8" diam. These have 17 L-shaped metal (tin can) brackets cemented to the disk and padded with plastic foam to accomodate the 7/8" boxes in 16 spaces. Each disk is painted black and then each of the 16 spaces is numbered near the edge for reference. The supports at the front are slotted at the 1-3/4" height for the legs of the base with the front glass on top. White paint near the center post identifies each disk as "A" or "B". The two supports for the base are cut away on the inner side up to the slot for the base legs, to permit easy change of disks. Similarly, the center post is filed off at the top front to permit easy loading of a disk with its M/M's.

THE COVER:

This is the simplest part of the works--cardbaord construction, painted black. It's just a fit over the base center post and over the front supports, totally enclosing the disk and its specimens. The only special feature is the slot on the right side, at the height of the disk, to insert a finger to pull the disk forward (for clockwise rotation, with a corresponding note on the cover: SLOWLY, PLEASE"

Note that the specimens are totally enclosed by the cover and front and top cover glasses.

THE LIGHT:

An old "high intensity" lamp with a 12 volt transformer and bulb. The transformer is now a permanent resident of my scope case, with special connectors to the lamp leads. New in '88 is the variable resistor in the lamp lead to vary power to the lamp. This is supplemented by a pointer knob and a contrived scale on paper numbered from 1 to 7. Tested with each displayed specimen, preferred light levels were found for each specimen and recorded in a circle for the specimen. (See the "SUGGESTIONS" and the data format, below.)

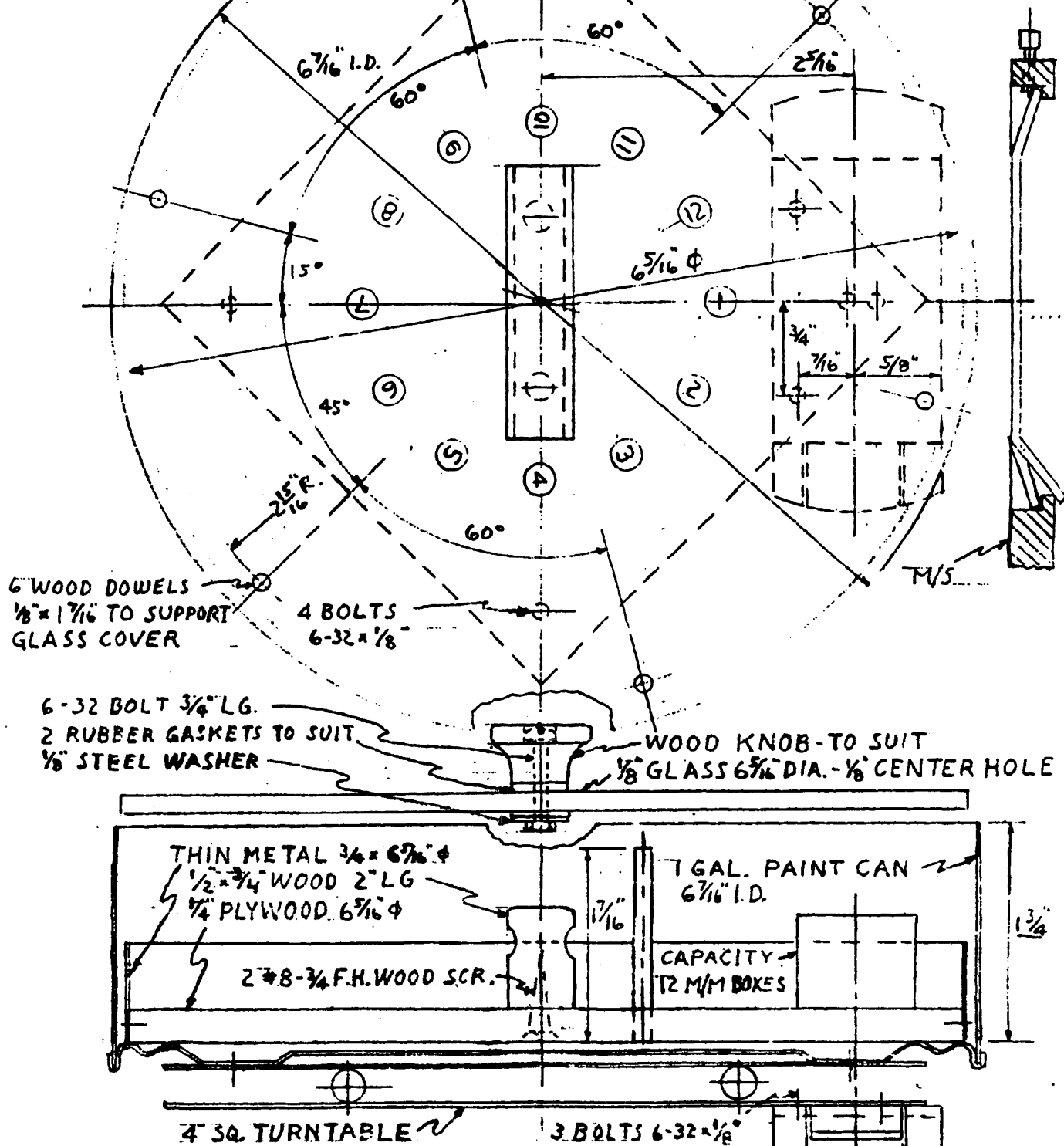
For those with more sophisticated scopes, John Ade, Chairman of ESCONI M/M Group, has provided the plan of his carousel (the term "carousel" came into vogue with the more elaborate scopes (my original was simply a "merry-go-round"). As shown, it was designed for a Nikon scope; others will probably require some modification of the basic idea.

Two problem areas will probably be encountered: the first is the glass disk, which guards specimens from dirt and damage. The scope, of course, looks through the glass. In the original

APPROX. COST OF PARTS

- TURNTABLE \$1.35
- GLASS COVER \$2.98
- PAINT CAN \$1.50
- 6-32 BOLTS #0.48

PAINT INTERIOR FLAT BLACK



6 WOOD DOWELS
1/8" x 1 7/16" TO SUPPORT
GLASS COVER

4 BOLTS
6-32 x 1/8"

6-32 BOLT 3/4" LG.
2 RUBBER GASKETS TO SUIT
1/8" STEEL WASHER

WOOD KNOB- TO SUIT
1/8" GLASS 6 5/16" DIA. - 1/8" CENTER HOLE

THIN METAL 3/4" x 6 7/16" φ
1/2" x 3/4" WOOD 2" LG
1/4" PLYWOOD 6 7/16" φ

1 GAL. PAINT CAN
6 7/16" I.D.

2 #8-3/4 F.H. WOOD SCR.

CAPACITY
12 M/M BOXES

4" SQ. TURNTABLE

3 BOLTS 6-32 x 1/8"

MICROSCOPE CAROUSEL
MARK II

12-28-84 FULL SCALE JOHN ADE

1/16" x 1 1/4" STEEL 3 1/32" LG TO SUIT NIKON M/S
OR HARDWOOD DISC 3 1/32" DIA. x 1/4" H
NOTE: EITHER ABOVE MUST SUIT M/S

simpler version the enclosing housing and the small rectangular top glass cover (through which the scope looks) make the rounded and drilled glass disk unnecessary. Optical properties of a plastic disk??

The second possible source of difficulty is the turntable. Checking several hardware stores in my area, I found only one with a turntable. This is a RUBBERMAID plastic unit of the Lazy Susan type, a 10-1/2" disk. It is about 8-3/8" diameter outside the bearing circle. It could be cut down, leaving ears for mounting, but this of course nullifies all dimensions on the Ade plan. (In response to my question, RUBBERMAID replied that they do not make a smaller one). An obvious alternative is to use a 3-bearing arrangement like that of the original (2 small ball bearings which I had, plus wheel and axle from a HO model RR truck).

These problems are not insurmountable; an application of a little ingenuity adds spice to the project. You're on your own, and good luck!-- but get in touch if necessary.

INFORMATION DISPLAY:

Just as important as the specimen is the info we give the more or less unknowing visitor. The format worked out is as follows:

TRILOBITE SPECIMENS or whatever

# at edge of disk	Best Ident. level	DESCRIPTION	Period	Location
1	3	CAT # here		FM
-	2			
16	7			

This data (above) is displayed on a 9 x 12" clip board.

SUGGESTIONS TO THE VISITOR:

SUGGESTIONS

BEFORE YOU START

16 SPECIMENS: The right side of the housing has a slot. Put your finger in the slot, on the edge of the disk, and move it toward you. The clockwise rotation of the disk will bring specimens 1 to 16 into view in turn.

FOCUS: Probably best without your glasses; use the knob on the right to raise or lower the scope into best focus. If you can't focus clearly, reduce the illumination (see Below). At the edge of the disk near you, is a white number at each space. A corresponding number on the left side of the list at your left identifies the specimen. A circled digit, 1 to 7, in the second column is the suggested illumination for that specimen.

LIGHT: A pointer knob below the light bulb has illumination numbers shown in a quarter-circle. Set the pointer to the number suggested for that specimen. Your eyes may require more or less light, but excessive light makes focussing more difficult.

NOTE: Separate disks for miscellaneous Phyla and for trilobite specimens will be changed at approximately half-day intervals.

~~Many visitors resist reading this info until they are told "you'll see more if you read it."~~

FINAL: EXCEPTIONS

CORRECTION: In the October Digest's "Microfossils?--Why?", page 3, Endothyra bailevi was written as one word due to a typo.

COLLECTING REGULATIONS ON FEDERAL LANDS

by John Boland, LaCrosse, WI

Federal lands supervised by the BLM and National Grassland regional offices are open for non-commercial collectors. Current collecting rules are:

1. Common invertebrate and plant fossils (other than petrified wood) may be collected in reasonable quantities for hobby, recreational, or private use. Collection for commercial sale of these materials is not permitted.

2. Collection of vertebrate fossils is not allowed, except under a paleontological collecting permit issued to professional paleontologists.

3. The collecting of petrified wood is managed under the Act of September 18, 1962, and rules promulgated in 43 CFR 3600. Petrified wood

may be collected for hobby use in amounts not exceeding 25 pounds per person per day, plus one piece. The total amount that one person may remove in one calendar year shall not exceed 250 pounds. A permit is required to collect a petrified wood specimen weighing 250 pounds or more. Pooling of quotas to obtain petrified wood specimens larger than 250 pounds is not allowed. Petrified wood obtained from BLM lands is not to be sold or bartered.

4. Mineral specimens may be collected from BLM lands for personal use only. Collection for sale is not allowed. Explosives, motorized or mechanical devices, other than metal detectors, may not be used to obtain specimens.

Maps can be purchased from BLM regional offices, and helpful suggestions for collecting sites can be obtained.

Please ADD the Following NEW MEMBERS to Your Directory:

Allen Johnston
7 Rich Hill Crescent, Knock
BELFAST BT5 6HF
NORTHERN IRELAND

Unemployed. Will trade. Major interest Cambrian Period and the Carboniferous period. Member of The Palaeontological Association, London, ENGLAND. Wants to learn more about Palaeontology and to meet people with an interest the same as his own.

Ed Miller
114 E. Logan St.
Argos, IN 46501

Art Teacher. Will trade. Major interest brachiopods, horn corals, & other local fossils. Has for trade Indiana fossils. Loves to hunt and to learn more about the origin of his home territory.

Robert N. Morgan
12540 S.W. 37 St.
Miami, FL 33175

Assistant Manager--Sou. Bell Tell. Will trade some. Major interest vertebrate fossils & shark teeth. Has for trade a few shark teeth. Member of FLA Paleontological Society, Gainesville, FL; Bone Valley Fossil Society, Lakeland, FL; & S.W. Fla. Fossil Club, Port Charlotte, FL. Wants to learn more about Paleontology, find new areas to collect, and share with others.

Linda Carole Mosley
& son William
4150 West Outer Dr.
Detroit, MI 48221

Science teacher. "My son loves this 'stuff,' and Tom Witherspoon convinced me that I loved this 'stuff,' too."

Mary Ann Sara
2635 Glenview
Royal Oak, MI 48073

Teacher. A beginner interested in any fossil. Wants to talk to others who are interested in fossils--and maybe go on group searches.

Please Note the Following CHANGES OF ADDRESS and CORRECTIONS.

Leslie H. Heinzl
2090 River Reach Dr. #35
Naples, FL 33942

David A. Pauli
329 Farallone Ave.
Firecrest, WA 98466

ADVERTISING SECTION

Ads are \$3.50 per inch (6 lines x 1 column--43 spaces). Send information and checks payable to MAPS to: Mrs. Gerry Norris, 2623 34th Avenue Ct., Rock Island, IL 61201. Phone: (309) 786-6506. This space is a \$3.50 size.

FOSSILS FOR SALE

ALL ARE EXCELLENT & UNREPAIRED

TRILOBITE GREENOPS BOOTHI 1" CANADA, DEVONIAN--\$95
TRILOBITE PHACOPS RANA CRASS 2-1/2" OH, DEVONIAN--\$220
SHARK TOOTH LAMNA OBLIQUA 3" MOROCCO, EOCENE--\$25

UNIVERSAL FOSSILS

23871 MORITZ

OAK PARK, MICHIGAN 48237

GRAF, IOWA, SITE TO BE CLOSED

Those of you who have hunted cephalopods in Graf, IA, may be surprised to learn that the site is actually private property. Martin Stries, who owns the property, called me recently to let me know that he will be closing the site to collecting in the Spring because he is worried about liability. He will be putting up a fence and posting the area with "no trespassing" signs. He said he has contacted the people in Iowa City about purchasing the property so it could be preserved as a collecting site, and they told him to contact the State. However, the State has shown no interest in the property. He also said he has someone interested in hauling the rock away for fill!

The Mid-America Paleontology Society (MAPS) was formed to promote popular interest in the subject of paleontology; to encourage the proper collecting, study, preparation, and display of fossil material; and to assist other individuals, groups, and institutions interested in the various aspects of paleontology. It is a non-profit society incorporated under the laws of the State of Iowa.

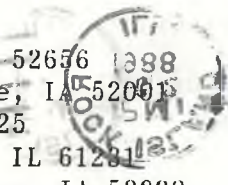
Membership in MAPS is open to anyone, anywhere who is sincerely interested in fossils and the aims of the Society.

Membership fee: January 1 through December 31 is \$10.00 per household. Institution or Library fee is \$25.00. Overseas fee is \$10.00 with Surface Mailing of DIGESTS OR \$25.00 with Air Mailing of DIGESTS.

MAPS meetings are held on the 1st Saturday of each month (2nd Saturday if inclement weather). October & May meetings are scheduled field trips. The June meeting is in conjunction with the Bedford, Indiana, Swap. A picnic is held in August. November through April meetings are scheduled for 2 p.m. in the Science Building, Augustana College, Rock Island, Illinois. One annual International Fossil Exposition is held in the Spring.

MAPS official publication, MAPS DIGEST, is published 9 months of the year--October through June.

- President: Karl Stuekerjuergen, Rt. 1, West Point, IA 52656
- 1st Vice President: Peggy Wallace, 290 South Grandview, Dubuque, IA 52001
- 2nd Vice President: Doug DeRosear, Box 125, Donnellson, IA 52625
- Secretary: Jo Ann Good, 404 So. West 11th St., Aledo, IL 61231
- Treasurer: Sharon Sonnleitner, 4800 Sunset Dr., Fairfax, IA 52228
- Membership: Tom Walsh, 501 East 19th Avenue, Coal Valley, IL 61240
- EXPO Editor: Madelynne Lillybeck, 1039 33rd St. Ct., Moline, IL 61265



CYATHOCRINITES

MID-AMERICA PALEONTOLOGY SOCIETY

Mrs. Sharon Sonnleitner
 MAPS DIGEST Editor
 4800 Sunset Dr.
 Fairfax, IA 52228

EXPIRATION DATE..... 12/88
 Allyn & Dorris Adams
 612 W. 51st Street
 Davenport, IA 52806

Dated Material - Meeting Notice