



PROJECT

Make a Breakdown Show Case

A Customized Case Gives You the Home Advantage

Story and Photos by Dave Fisk

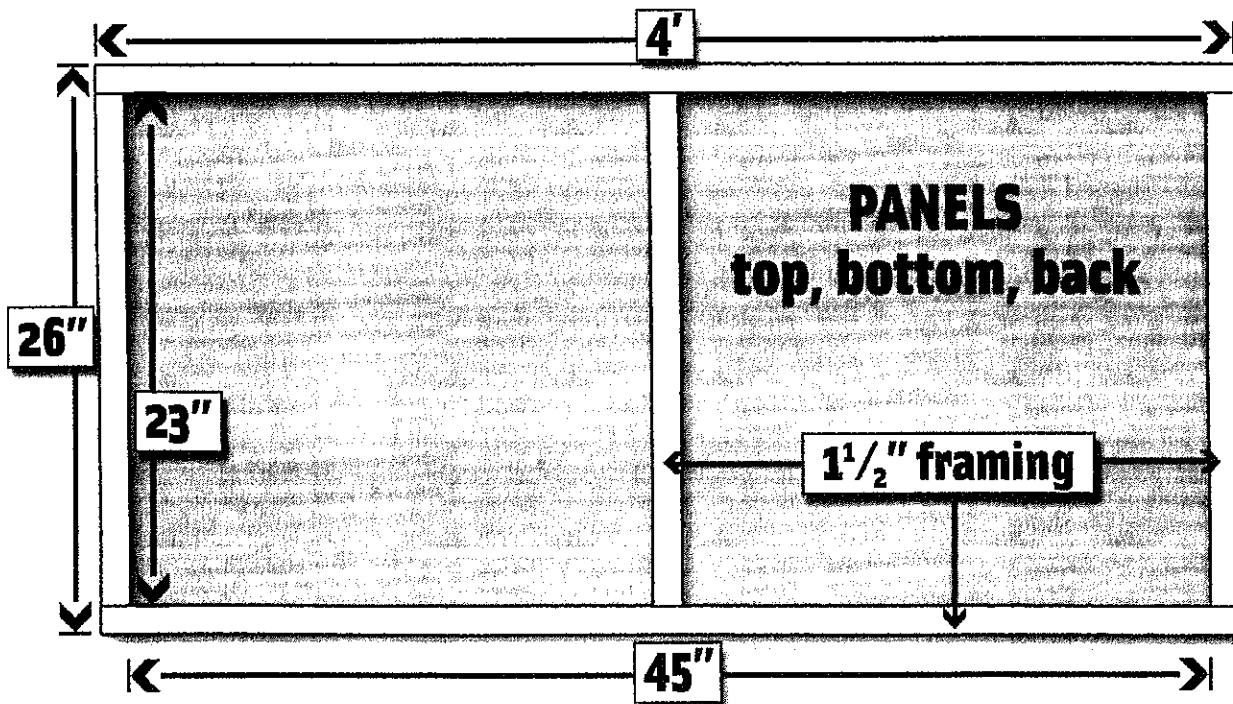
In order to make my displays at gem shows more dramatic and pleasing, I decided to make my own display case to federation standards. With it I could practice setting up displays at home, and I could make custom fittings for the inside of the case. To make it easy to transport, I decided to make it collapsible. I borrowed a case from the Roseville Rock Rollers and analyzed all the dimensions and materials. I then proceeded to clone the Roseville club's case. Here is how I did it, step by step.

From a sheet of 1/8-inch paneling, I cut one 22-inch by 48-inch piece for the bottom of the case; one 22 1/2-inch by 48-inch piece for the back; and two 22 3/16-inch pieces for the sides.

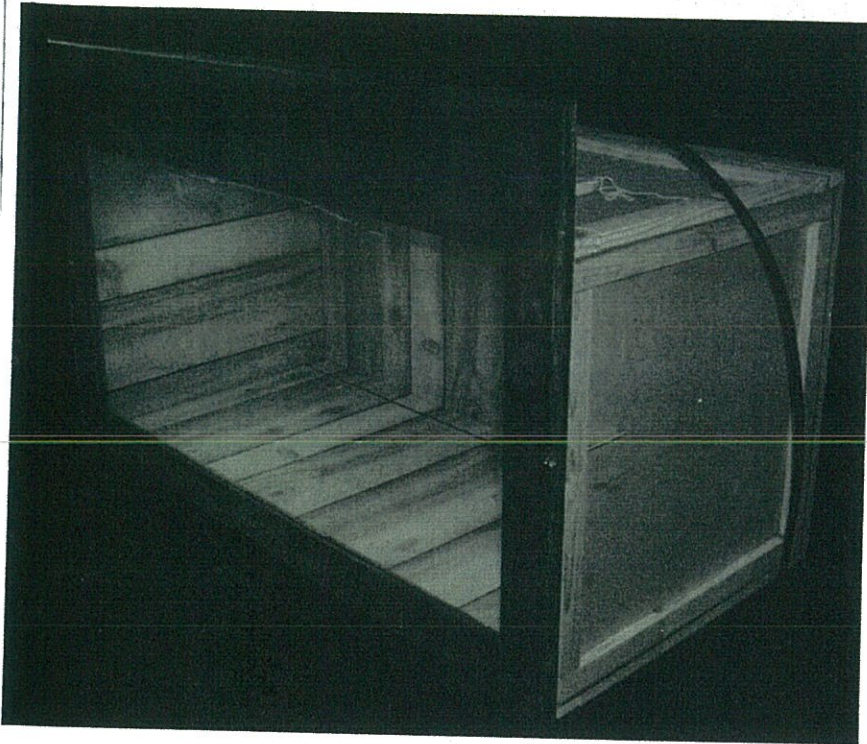
From a sheet of 1/8-inch (could also be 1/4-inch) perforated hard-board, I cut one 21-inch by 48-inch piece.

I cut one of the 1-inch by 4-inch by 8-foot boards in two, creating two 1-inch by 4-inch by 4-foot boards. I ripped (cut lengthwise) one of these boards 2 inches wide and the other 2 7/8-inches wide. These boards will be attached to the back panel.

continued on page 74

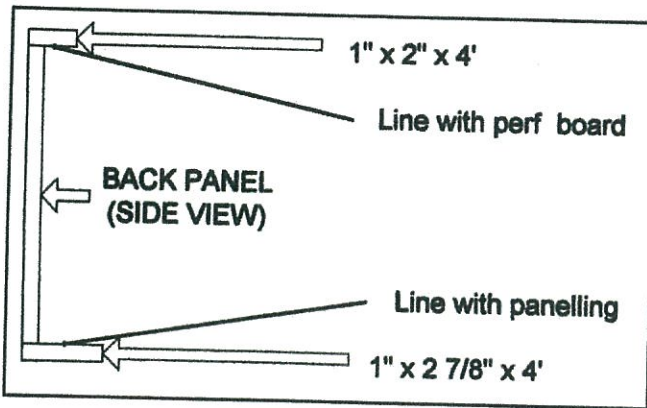


Frame the 4-foot by 26-inch top, back, and bottom panels with 1 1/2-inch pieces of wood by gluing and clamping the pieces.

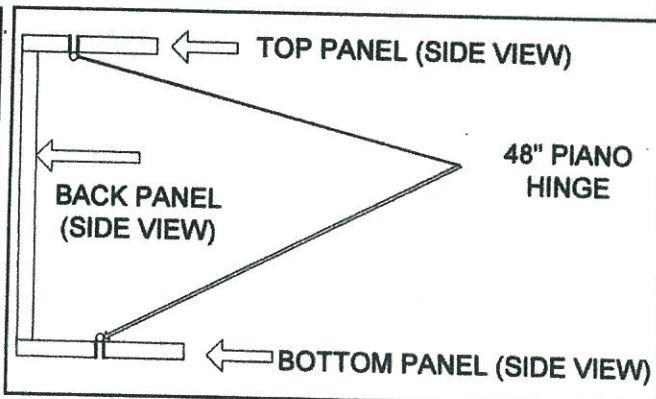


MATERIALS:

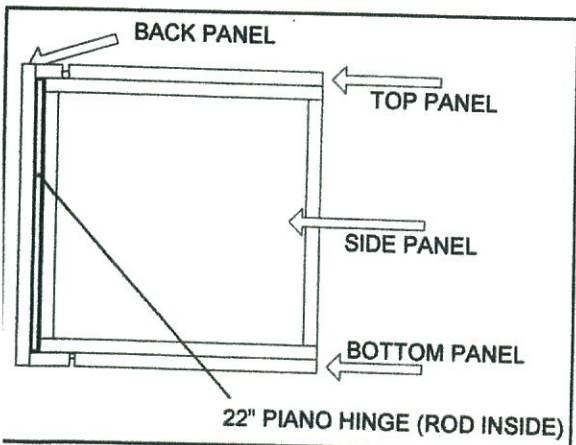
- two 1/4-inch x 4-inch bolts and nuts
- four sheet metal screws
- two 75 Watt light bulbs
- 11 feet of 16-gauge three-wire cord
- one three-prong plug
- two 4-inch metal electrical boxes
- one glass pane approximately 20 3/16 inches x 42 inches
- two 22.25-inch piano hinges
- two 48-inch piano hinges
- two 4-inch porcelain pull sockets
- six 6 spade connectors
- two 2-inch steel straps
- two 2-inch x 18-inch steel straps
- two wire nuts
- one 48-inch x 21-inch perforated hardwood sheet
- one 1/8-inch-thick wall panel, 4 feet x 8 feet
- six 1-inch x 4-inch x 8-foot pine boards
- one 1-inch x 8-inch x 4-foot pine board



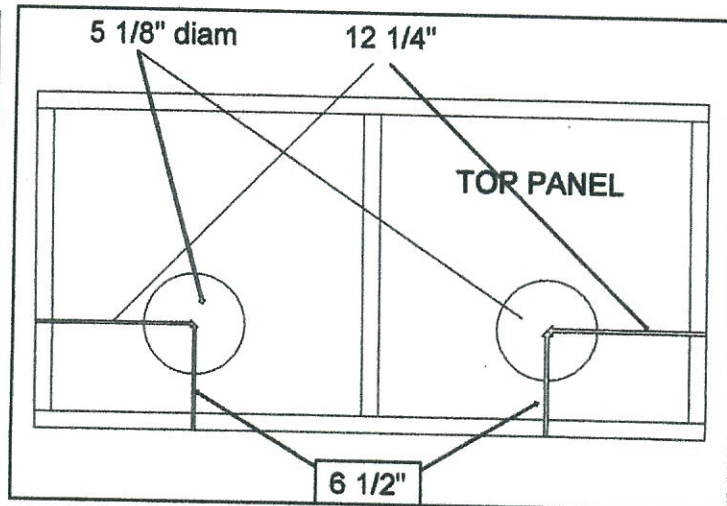
Line the 2-inch board with perforated hardboard and the 2 7/8-inch board with panelling.



Attach the case top and bottom panels to the case back.



Attach the side panels to the back panel with 22.25-inch piano hinges.



Cut light holes in the perforated hardboard of the case top.

Rock & Gem

Customer Service

TO ORDER A SUBSCRIPTION:

For faster service, subscribe online using our secure server at www.rockngem.com, or send a check or money order for \$24.00 for 12 monthly issues to Rock & Gem, P.O. Box 469112, Escondido, CA 92046-9524.

WHAT TO DO IF YOU HAVE PAID FOR YOUR SUBSCRIPTION BUT STILL RECEIVE A BILL:

The check and the invoice may have crossed in the mail. You can check your order online at www.rockngem.com. It may take up to four weeks to process your check, so if you wrote the check less than four weeks ago, disregard the bill you received. If you paid for your subscription more than four weeks before you received another bill, send a copy of your cancelled check along with your bill to Rock & Gem, P.O. Box 469112, Escondido, CA 92046-9524.

TO SOLVE A SUBSCRIPTION PROBLEM:

You can check the status of your subscription online at www.rockngem.com. Remember, it may take up to eight weeks to change an address and 6-8 weeks to start a new subscription. Please give us time to get your magazine to you, and if it still doesn't arrive, please e-mail us at RockAndGem@pcspublink.com or call 1-760-291-1549. If your subscription has already started, or you receive a damaged copy, please email us, and we will send you a replacement copy.

RENEWALS:

It can take up to 6-8 weeks to process your renewal, so don't wait! Renew early so you don't miss an issue. You can renew online at www.rockngem.com using the Inet number listed on the address label of your magazine, or just return the renewal form with your check or money order. Please do not send cash! If you renew your subscription before your expiration date, we'll add on the new issues at the beginning of your expiration issue. You won't lose any issues by renewing early, and you'll guarantee you won't miss any!

TO GET ANOTHER COPY OF THE ISSUE:

Additional copies are available at the newsstand, or you may order them online at www.rockngem.com.

BACK ISSUES:

Back issues are available online at www.rockngem.com.

MOVING?

You can change your address online at www.rockngem.com using the Inet number listed on your magazine label, or call 1-760-291-1549. It can take 6-8 weeks to get an address change processed, so make sure you contact your local post office and ask them to forward all of your mail.

HOW TO PLACE AN AD IN ROCK & GEM:

Please contact Brian Roberts via email at brian@millerlags.com or call him at 623-327-3525.

HOW TO SELL ROCK & GEM IN YOUR STORE:

Contact Dana Gurnee via email at dgurnee@millerlags.com, or call him at 805-644-3824 Ext. 24.

VISIT US AT WWW.ROCKNGEM.COM.

74 www.rockngem.com

Breakdown Show Case *from page 72*

I ripped the 1-inch by 8-inch by 4-foot board to 1 inch by 7 inches by 4 feet. This will form the top stile of the case front.

Next, I cut one of the 1-inch by 4-inch by 8-foot boards in two, creating two 1-inch by 4-inch by 4-foot boards. I ripped one of these boards to 1 inch by 3¼ inches by 4 feet. This will be the bottom stile of the case front.

I cut one of the 1-inch by 4-inch by 8-foot boards into two pieces 26 inches long and saved the remainder of the wood. I ripped the two pieces to 3¼ inches wide. These will be the side rails of the case front.

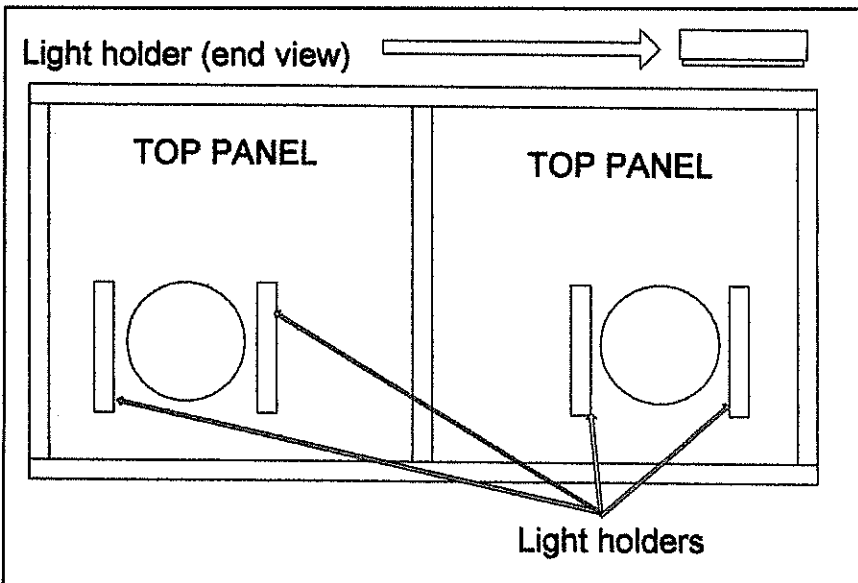
I ripped the remaining 1-inch by 4-

inch by 8-foot boards and the waste from my previous cuts to 1½-inch widths. These will be used to frame the panels and create the light holders.

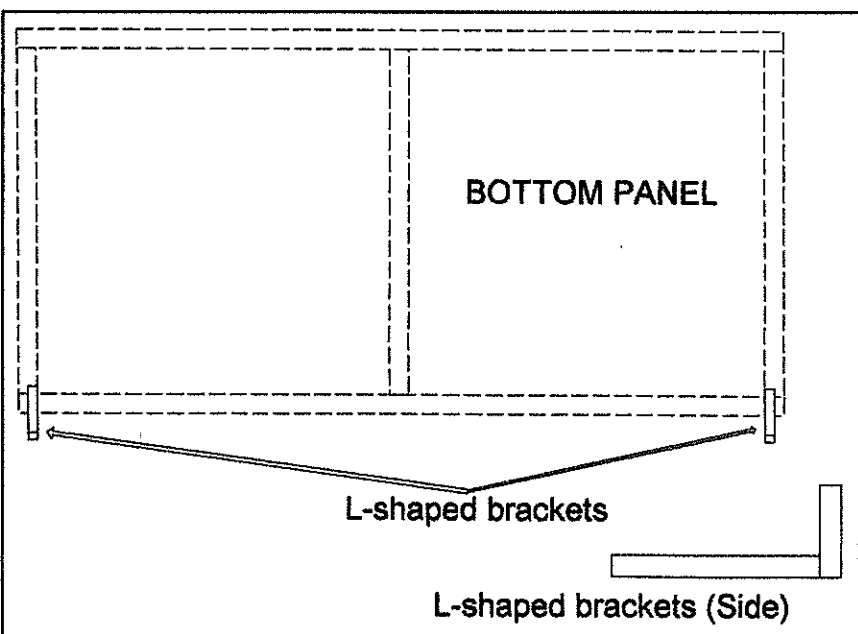
I framed the top, back, bottom, and side panels with 1½-inch pieces by gluing and clamping the pieces. Then I cut two pieces of wood 7 inches by 1 inch by 1½ inches to serve as light holders.

I attached a 1-inch by 2-inch by 4-foot board and a 1-inch by 2½-inch by 4-foot board to the assembled back panel with glue and screws. I lined the 2-inch board with perforated hardboard and lined the 2½-inch board with paneling.

continued on page 76



Attach light holders to the perforated hardboard of the case top.



Attach the bottom brackets to the case's bottom panel.

Rock & Gem

CLOSEOUT

FINE QUALITY GEMS AT LIQUIDATION PRICES!

FACETED STONES

EMERALD, fine color, rounds 1.5 mm \$0.35, 1.75 mm \$0.75, 2 mm \$1.25, 2.5 mm \$1.75, 2.75 mm \$2.25 & 3 mm \$2.50 ea.

RUBY, Burma, fine color marq., 3.5x1.75 mm \$2.50, 4x2 mm \$3.50 per each, round, super fine, 2 mm \$6.00, 2.5 mm \$7.50 ea.

SAPPHIRE, fine blue, round, 1.5 mm \$0.35, 1.75 mm \$0.60, 2.5 mm \$2.00, 3 mm \$5.50 ea.

SPINEL, Burma, white, pink & orange fire, round 2 mm \$2.00, 2.5 mm \$2.75, 3 mm \$4.50 ea.

AMETHYST, fine med color, 3 mm, rounds \$0.60, princess & trillion cut \$0.70, marquise 2.5x5 mm \$0.60, 3x6 mm \$0.95 ea.

AMETHYST, Gem color, ovals 7x5 mm \$3.50, 8x6 mm \$4.75, checkerboard rounds, 9 mm \$9.50, trillion 9 mm \$9.50, cushion 10x8 mm \$14.50, 9x7 mm \$12.50 ea.

BLACK SPINEL, fine quality, rounds, 3 mm \$0.35, 4 mm \$0.65, 5 mm \$0.90, 6 mm \$1.50, 6 mm princess cut \$1.75 ea.

SILVER TOPAZ, fine rounds, 3 mm \$0.65, 4 mm \$0.80, 5 mm \$1.25, oval, 6x4 mm \$1.25, 7x5 mm \$2.50, 9x7 mm \$4.50 ea.

HESSONITE, fiery orange, fine quality, 3 mm \$1.25, 4 mm \$2.75, oval, 5x3 mm \$3.50, 6x4 mm \$4.50, 7x5 mm \$8.50 ea.

GARNET, fiery red, fine quality, ovals 6x4 mm \$2.00, 8x6 mm \$6.00, 9x7 mm \$11.50 ea.

RHODOLITE, fine pink, rounds, 3 mm \$0.95, trillion & princess cut \$1.10, marquise, 6x3 mm \$1.75, oval, 6x4 mm \$3.50 ea.

SPESSARTITE, Mandarin fine quality orange, round, 2 mm \$3.00, 2.5 mm \$4.50, 3 mm \$7.00 ea.

SUNSTONE, Oregon, fine quality, rounds, yellow, 4 mm \$0.55, pink shiller, 3 mm \$0.65, 4 mm \$0.80, pink, ovals, 6x4 mm \$3.00, 7x5 mm \$5.50 ea.

TANZANITE, fine quality, rounds, 2.75 mm \$8.75, 3 mm \$18.00, 4 mm \$28.00 ea.

ZIRCON, Cambodia, medium blue, fine quality, rounds, 2 mm \$1.25, 2.5 mm \$2.10 ea.

CITRINE, Gem gold color, checkerboard, rounds and trillion, 10 mm \$10.00, 11 mm \$12.00, 12 mm \$14.00, ovals, 11x9 mm \$14.00, 12x10 mm \$16.00, 14x10 mm \$18.00 ea.

MEXICAN OPAL, fine quality rounds, white opalescent, 3 mm \$0.65, yellow orange, 3 mm \$0.75, orange \$1.50, fire orange \$3.50, ovals, white opalescent, 7x5 mm \$0.99, 8x6 mm \$2.50, yellow orange, 7x5 mm \$2.50, 8x6 mm \$4.50 ea.

TEKTITE, Thailand, ovals, 8x6 mm \$1.25, 9x7 mm \$1.75, 10x8 mm \$2.50, 11x9 mm \$4.50 ea.

GREEN AGATE, rounds, 3 mm \$0.35, 4 mm \$0.55, princess cut, 4 mm \$0.55 ea.

HELENITE, volcano stone, rounds, red, blue yellow, color, 3 mm \$0.90, 4 mm \$1.50 ea.

CABOCHON STONES

AMETHYST, Gem color, rounds, 4 mm \$0.85, ovals, 7x5 mm \$1.50, 9x7 mm \$2.75 ea.

BLACK STAR SAPPHIRE, 6x4 mm \$3.50, 8x6 mm \$8.50 ea.

INDIAN SUNSTONE, fiery orange ovals, 6x4 mm \$0.75, 8x6 mm \$2.25 ea.

TOURMALINE, pink rounds, 4 mm \$3.00, 5 mm \$4.50 ea.

BURMA JADE & MAWSITSIT ROUGH - HUGE SELECTION!

LARGER STONES, miscellaneous items, Gemstone Carvings, micro sized to 10 inches high, call for **FREE list**.

FACETING AND CARVINGS SERVICES 35 years experience, call for details.

E-mail pictures of all items available upon request.

VISA, MC, AMEX, CHECK, Money Orders Are Welcome

Please add \$5.00 S&H for U.S.A. and Canada. All others: Call for rates.

VR GEM CUTTERS, PO BOX 1263, Thousand Oaks, CA 91358. virgms@msn.com
CALL TOLL FREE 1-888-777-3148 OR 1-805-241-1700

You Can Find Gold

With A Metal Detector 2003 Edition, 6th Printing
by Charles Garrett & Roy Lagal

Two veterans of metal detecting and prospecting share their lifetimes of secrets to prove that the right detector can produce more ounces of gold per dollar invested than any other type of equipment. Learn how to recover nuggets in streambeds, to search for veins, and to seek nuggets in dredge and mine tailings. Open up new vistas of excitement and profit! Only \$12.45! (\$13.35 for orders sent to California addresses. \$19.45 for orders outside the U.S.)

Send payment to: The Bookshelf, P.O. Box 6925, Ventura, CA 93006. Check, M.O., Visa, MasterCard
(give card number, expiration date, and three-digit security code from back of the card).

Please allow four weeks for delivery.

76 www.rockngem.com

Show Case from page 74

I attached the bottom panel to the back panel with a 4-foot piano hinge. Then I attached the top to the back panel with a 4-foot piano hinge. Next, I attached the side panels to the back panel with 22-inch piano hinges.

Measuring 6½ inches in from the front and 12¼ inches in from the sides, I cut two holes in the top panel using a jig saw and a 1-pound coffee can or lid as a template.

I cut a notch along each 7-inch light holder for the lip of the metal strap in the light assembly to fit into. I attached 7-inch light holders to the top of the case using glue and clamps.

I attached two 2-inch holding straps to the case bottom with wood screws.

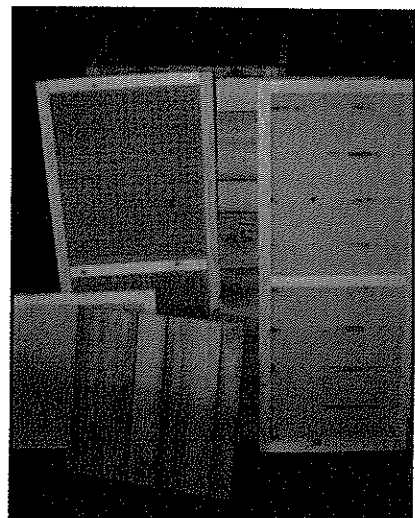
I cut 45-degree angles at the ends of each of the 26-inch pieces of board and at the ends of the 3¼-inch by 48-inch bottom piece of the case front. Then I cut a 45-degree angle on each end of the 7-inch by 4-foot by 1-inch top piece of the case front. I assembled the four pieces like a picture frame.

I routed a ¼-inch-wide, ⅜-inch-deep dado around the inside of one side of the picture frame case front and made the corners square using a chisel. I measured the opening and purchased a pane of ⅜-inch-thick glass to fit (20⅞ inches by 42 inches). I placed the glass in the frame and secured it using glazier's points.

I cut the 11-foot piece of electrical wire into one piece 3 feet long and one 8 feet long. I stripped the insulation back 2½ inches from both ends of both pieces of wire. I also stripped ½ inch of wire at both ends of each piece of cord.

I attached a three-pronged plug to one end of the 8-foot section of wire.

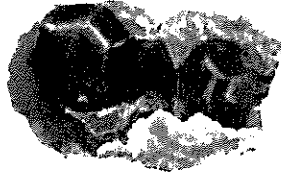
continued on page 78



The components of the case are framed in 1½-inch pine strips and covered with panelling or perforated hardboard.

Rock & Gem

OCTOBER 13, 14 & 15, 2006



Exhibited by Detroit's Own
Children's Museum:
Some of the Best Copper Crystals
To come out of Michigan's
Copper Country



GREATER DETROIT GEM, MINERAL, FOSSIL & JEWELRY SHOW

Presented by the Michigan Mineralogical Society
www.michmin.org

Over 50 Choice Dealers

Dazzling Exhibits from Top
Museums and Universities
Of the US and CANADA including the
Smithsonian Institute, Royal Ontario Museum
And many more

Contact: 248-887-3906
cnmwerner@bignet.net

Macomb Community College South Campus Expo Center,
Bldg. P, 12 Mile rd. & Hayes, Warren, MI



Cast of the Giant
10' Tall Stegodon

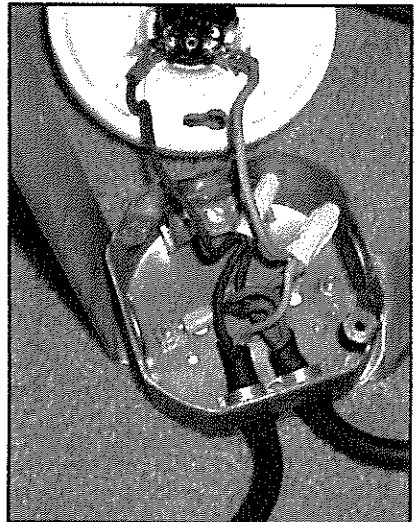
Show Case *from page 76*

I ran one end of the 3-foot wire through a 4-inch electrical box, and attached wires to the positive and negative leads of one porcelain pull-chain fixture. I attached the ground to the box with a small screw and nut. I screwed down the holdfast to hold the 3-foot wire inside the box. Then I screwed the porcelain pull-chain fixture into place on the 4-inch electrical box.

I ran the unused ends of the 8-foot and 3-foot wires into another 4-inch electrical box. I attached 6-inch pieces of wire to the positive and negative connectors of the other porcelain pull-chain fixture. I connected the positive wires from the 3-foot section to the positive wires from the 8-foot section with a wire nut and did the same with the negative wires. I attached the ground wires to the electrical box using a small bolt and nut. I screwed down holdfasts to hold the wires inside the box. Finally, I screwed the porcelain pull-chain fixture into place on the 4-inch electrical box.

I cut two 2-inch by 18-inch strips from a sheet of 20-gauge steel sheet. I bent the strips 1/2 inch from each end and bent one strip around each electrical box. I attached the strips to the electrical boxes using two sheet metal screws in each strip. I placed light bulbs in the porcelain pull-chain fixtures. Then I plugged them into a wall socket and tested the lighting units.

I opened the assembled case top, back, bottom, and sides. Placing the case front against the opened assembly, I drilled two 1/4-inch holes through the front and through the 1 1/2-inch panel framing on both sides. I attached the front to the assembly using 1/4-inch bolts and nuts. ♥



I ran the 3-foot wire and the 8-foot wire through a 4-inch electrical box, attached them to a porcelain pull-chain fixture, and attached the ground wires to the electrical box.

Rock & Gem

FOSSILS · SILVER · JEWELRY · CARVINGS · FOSSILS · SILVER · JEWELRY · CARVINGS

GEMSTONE BEADS · CRYSTALS · FACETED STONES · CABOCHONS

GEMSTONE BEADS · CRYSTALS · FACETED STONES · TUMBLE STONES · TUMBLE STONES · TURQUOISE · MINERALS · BOOKENDS

Come Visit One of Arizona's Largest Rock Shops!

American Turquoise

- Bisbee · Sleeping Beauty · Kingman · Cripple Creek ·
- Blue Diamond Mine · Royston · Ajax · Paiute · Damele ·

Browse through 150 tons of rocks and minerals from around the world plus crystals, cabs, machinery, jewelry, findings, Lapis, Turquoise, Sterling and Smithing supplies, books, etc.

Try us for all your lapidary needs.

DAH Rock Shop

3401 N. Dodge, Tucson, AZ 85716

(520) 323-0781 Mastercard & Visa accepted Mon.-Sat. 9:30-5:30

Price list on rough rock only! www.discountagatehouse.net

EGGS & SPHERES · COLOR STONES · EGGS & SPHERES · COLOR STONES

78 www.rockngem.com



American Federation of Mineralogical Societies

Jim Brace-Thompson
AFMS Juniors Program Chair
7319 Eisenhower Street
Ventura, CA 93003
Email: jbraceth@roadrunner.com
Phone: (805) 659-3577

August 27, 2012

Al DeHart
229 Cabell Drive
Newport News, VA 23602

Greetings, Al:

In follow up to last week's email correspondence, I'm very happy to pass along blueprints that I have on file for building a "Federation-style" display case for gem and mineral shows.

I have permission from Dave Fisk and *Rock & Gem* magazine to post his blueprints and instructions to the CFMS and/or AFMS web sites, which I'm hoping to do later this year so that everyone can have easy access to them. Meanwhile, I hope these three sample designs prove of some assistance to you.

Best regards,

A handwritten signature in blue ink, appearing to read "Jim Brace-Thompson", with a stylized flourish at the end.

Jim Brace-Thompson
AFMS Juniors Program Chair
CFMS Past President 2011