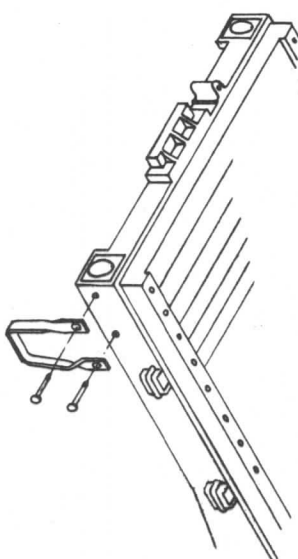


SD&AE WOOD SIDE GONDOLA CAR

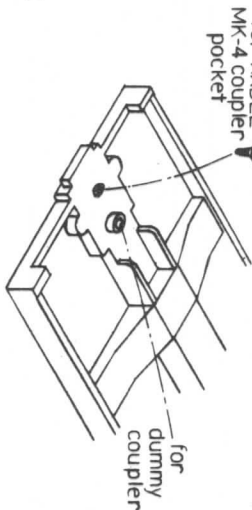
QUEEN TOOL & MFG. CO. PGH. PA.
drawn by D.G.F. date 9-6-64

1. CLEAN FLASH FROM BASE CASTING, USE PLIERS TO BREAK OFF LARGE PIECES, FINISH WITH A FILE AND A MODELERS KNIFE.

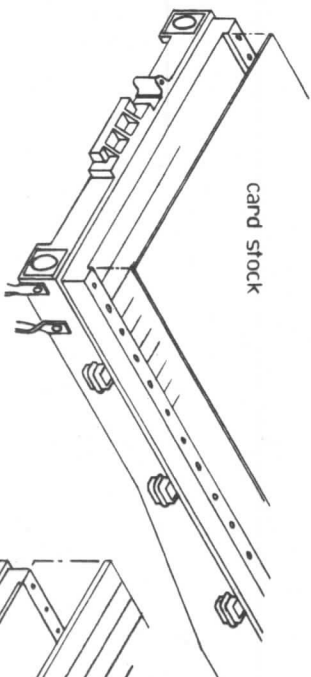
2. ATTACH END STEPS BY DRIVING IN PINS, THROUGH STEPS, INTO PREDRILLED HOLES AS SHOWN. SNIP OFF SURPLUS PIN ON INSIDE WITH DIAGONAL PLIERS.



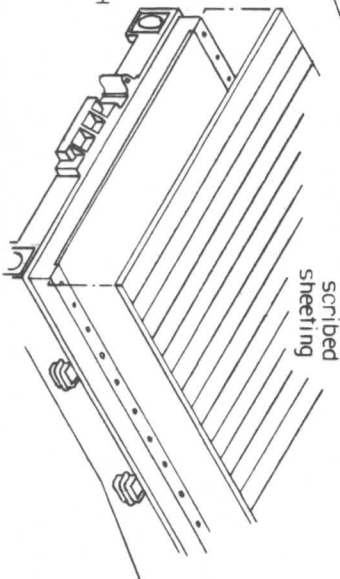
IF "KADEE" COUPLERS ARE USED, THE SELF-TAPPING SCREWS SHOULD BE THREADED IN AT THIS TIME. THE TAPPED BOSS FOR DUMMY COUPLERS SHOULD BE REMOVED.



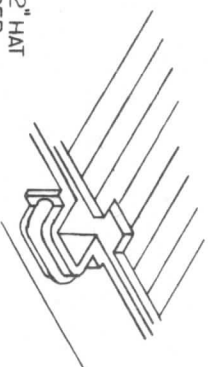
3. GLUE CARD STOCK PROVIDED TO TOP OF CAST BASE. MAKE CERTAIN IT IS FLUSH WITH THE ENDS OF THE BASE AND INSIDE THE RIVET STRIP ON EACH SIDE.



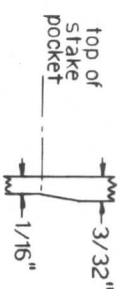
4. GLUE 1/32" THK. X 3/32" SCRIBED SHEET WOOD ONTO THE CARD STOCK. THE SHEETING SHOULD BE FLUSH WITH THE ENDS AND OVERHANG THE SIDES 1/32". THE SHEETING IS PRECUT TO THE EXACT WIDTH.



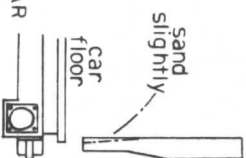
5. NOTCH OUT SCRIBED SHEETING FOR SIDE STAKES AS SHOWN IN THE ILLUSTRATION.



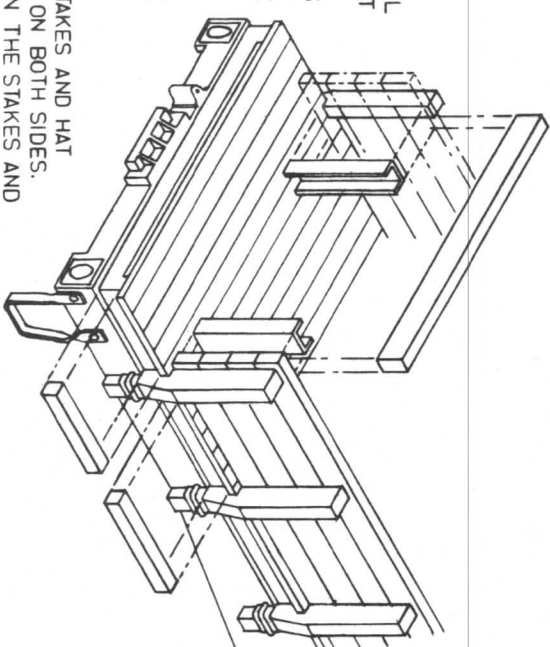
6. CUT SIDE STAKES FROM 3/32" X 1/16" STRIP WOOD AND 3/32" HAT SECTION. REFER TO PROTOTYPE PLANS FOR THE SIZE, NUMBER, AND LOCATION OF EACH STYLE. CUT THE 3/32" X 1/16" STRIP WOOD STAKES AS SHOWN BELOW SO THEY WILL FIT INTO POCKETS.



7. FORCE THE STAKES INTO THE STAKE POCKETS. ALL STAKES, EXCEPT THE LONG HAT SECTIONS, SHOULD EXTEND 3/16" BELOW THE POCKETS. THE LONG HAT SECTIONS SHOULD BE FLUSH WITH THE BOTTOM OF THE CAR SIDE. NOTE: IN SOME INSTANCES THE BACKS OF THE STAKES AND HAT SECTIONS WILL HAVE TO BE SANDED SLIGHTLY TO ALLOW THEM TO STAND PERPENDICULAR TO THE CAR FLOOR.



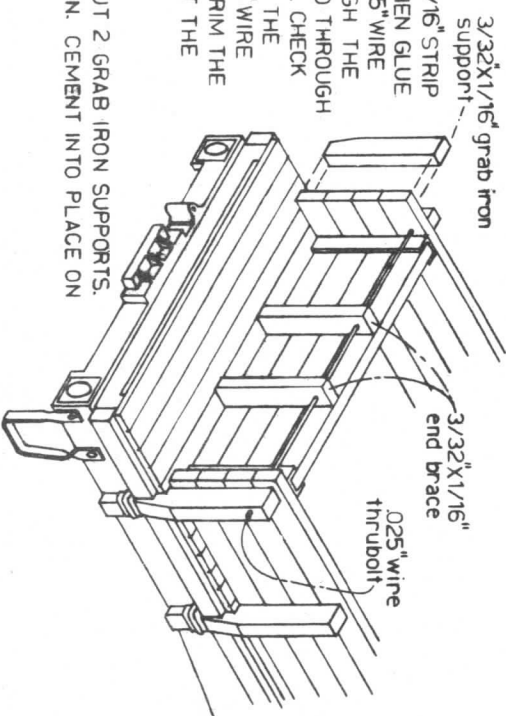
8. AT THIS TIME THE CAR SIDE BOARDS ARE FITTED. CUT TO LENGTH & PIECES OF 3/16" X 1/16" STRIP WOOD TO THE LENGTH SHOWN IN THE PROTOTYPE PLAN. ROUND ALL EDGES SLIGHTLY WITH SAND PAPER SO THAT EACH BOARD RETAINS ITS IDENTITY AFTER PAINTING. GLUE EACH BOARD TO THE BACKS OF THE STAKES AND HAT SECTIONS. NOTE THAT THE BOARDS OVERLAP THE LAST STAKE ON EACH END BY A DIFFERENT AMOUNT. REFER TO THE PLANS. BEFORE MOUNTING THE TOP BOARD MAKE SURE THE TOPS OF THE STAKES ARE EVEN AND 1/32" BELOW THE TOP OF THE BOARD.



9. INSERT 1/16" SQ. FILLER STRIPS BETWEEN STAKES AND HAT SECTIONS. THE WHOLE LENGTH OF THE CAR ON BOTH SIDES. THESE STRIPS SHOULD FIT SNUGLY BETWEEN THE STAKES AND INTO THE GROVE MADE BY THE SCRIBED SHEETING FLOOR AND THE SLIGHT STEP IN CAST BASE.

10. GLUE IN CHANNELS FOR THE CAR END BOARDS. CHECK THE PROTOTYPE PLAN FOR THE EXACT LOCATION. FROM 3/16" X 1/16" STRIP WOOD CUT 8 END BOARDS. TRIM ENDS SO THEY FIT SNUGLY INTO THE CHANNELS, ROUND ALL THE EDGES SLIGHTLY AND GLUE THE BOARDS INTO PLACE.

11. CUT 4 END BRACES FROM 3/32" X 1/16" STRIP WOOD AND GLUE INTO POSITION. WHEN GLUE HAS SET, INSERT A LENGTH OF .025" WIRE INTO A PIN VISE AND DRILL THROUGH THE LAST STAKE, THE END BRACES, AND THROUGH THE STAKE ON THE OPPOSITE SIDE. CHECK THE HEIGHT OF THE THRU BOLT ON THE PROTOTYPE PLAN. PUSH THE .025" WIRE THRU BOLT INTO THE HOLES AND TRIM THE ENDS SO THAT 1/64" EXTENDS PAST THE STAKES.



12. FROM 3/32" X 1/16" STRIP WOOD CUT 2 GRAB IRON SUPPORTS. TAPER THE LOWER ENDS AS SHOWN. CEMENT INTO PLACE ON DIAGONALLY OPPOSITE ENDS.

13. ADD THE GRAB IRONS AS SHOWN ON THE PLANS. THE SMALLER GRAB IRONS ARE PROVIDED. THE LARGER ARE FORMED FROM .025" BRASS WIRE. THE BRAKE WHEEL AND STAFF ASSEMBLY IS FIT INTO THE BRACKET ON THE END SILL. THE CAST METAL "K" TYPE BRAKE CYLINDER AND THE WOOD MOUNTING BLOCK ARE GLUED TO THE UNDERSIDE OF THE CAR AS SHOWN IN THE PLAN.

14. THE UNDERSIDE VIEW ON THE PLANS SHOWS THE COMPLETE BRAKE SYSTEM. MATERIAL IS PROVIDED SO THAT THE MODELER CAN ADD THESE DETAILS. AS THE BRAKE SYSTEM IS NOT VISIBLE WHEN THE CAR IS ON THE RAILS THESE DETAILS MAY BE OMITTED.

15. THE CAR IS NOW READY FOR PAINTING AND LETTERING. APPLY TWO THIN COATS OF BOXCAR RED, SANDING THE WOOD PARTS LIGHTLY BETWEEN COATS. WHEN THE PAINT HAS DRIED SUFFICIENTLY, ABOUT 24 HOURS, APPLY THE DECAL LETTERING AS SHOWN IN THE PLANS. USE "DECAL-SET" OR A SIMILAR PRODUCT FOR BEST RESULTS. AFTER THE DECALS ARE SET, A SPRAYED COAT OF DULL VARNISH WILL GREATLY ENHANCE THE APPEARANCE OF THE MODEL.

16. THE TRUCKS AND COUPLERS CAN NOW BE ATTACHED. THE TRUCK PARTS MUST HAVE THE FLASH REMOVED AND THE SIDEFAMES, BOLSTERS, AND SPRING PLANKS PAINTED OR DYED BLACK BEFORE ASSEMBLY. PAINT THE COUPLER POCKETS, IF "KADEE" ARE USED, OR DUMMY COUPLERS TO MATCH THE CAR BEFORE ASSEMBLY. ADD SHIMS BETWEEN THE COUPLER POCKET AND THE CAR OR BETWEEN THE TRUCK BOLSTER AND THE CAR, IF NECESSARY, TO ADJUST THE COUPLER CENTER LINE HEIGHT TO 17/32" ABOVE THE TOP OF THE RAIL.

17. ANDREWS' TRUCKS ARE CORRECT FOR THIS PROTOTYPE, BUT OTHER TYPES MAY BE USED.