



# The Lantern

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## Couplers – A Look at Styles and Types

By David Brazell & Dan King



In the August 2004 issue of Model Railroader there was an article “10 Weeks to a Better Layout with ten ways to improve running trains on your layout.” Second after track improvement was correct couplers. We’ll look at couplers in this article.

### N Scale Couplers

N scale couplers come in two main styles, the old standard Rapido type and the newer Micro Train kind. The Rapido coupler is an attempt by manufacturers to replicate the look of prototypical “hand shake” style. Unfortunately, many modelers claim they are out of scale – too large for N scale motive power and rolling stock. Some companies are still offering new N scale stock with Rapidos but they are slowly being replaced by Micro Train.

The Micro Train company devised and patented a coupler that’s more prototypical. They are smaller and feature a “dangling clasp” which resembles a hanging air hose connection. Some other manufacturers are copying Micro Train but the latter is easy to tell by the black plastic and gold tip pins for magnetic uncoupling.



### HO Scale Couplers

We can tell you from personal experience that proper height (we’ll discuss this next month) and correct attachment of couplers makes a world of difference

in how your cars run. You first have to decide what kind you would like to use. There are two primary types – “horn hook” and “knuckle.” Let’s examine each type.

The horn hook couplers are those most of us were introduced to when we first were exposed to HO scale. They are simple with one piece of plastic.



The advantage of these couplers is their strength and simplicity. We recommend the use of horn hook couplers especially if you are buying cars for a younger modeler – perhaps a child.

They will be relatively easy to use, are fairly strong (for long trains), and there are no small parts to deal with. Plus, they are a little stronger than the knuckle couplers because there isn’t a spring or knuckle to break. The big disadvantage to horn hooks is their lack of realism. If you are into realism, we recommend a knuckle coupler.

Knuckle couplers are made by several manufacturers – most noted are Kaydee and McHenry. Kaydees are pictured to the right.



Kadees have five parts: The top and bottom of the gear box, a metal lever that fits inside the gear box, a shank with the couplers on the end and a small spring that keeps the knuckle closed. The shaft is also made of metal which adds to its strength and durability.

Kaydees are not hard to attach to your cars. Some glue the draft box which we don’t recommend. There is a screw that will fit through the middle of the box

to attach the coupler to your car. What Dan and I have found to be best is to put a screw with a nut on the end to attach the coupler. A number two screw and bolt works nicely. You can put the end of the screw up into the car where it isn’t seen or drop it down toward the track. If you drop it down, cut the access off so it doesn’t interfere with track.

Personally, these are the couplers we both prefer. One caution – the spring on the knuckle part is easy to lose while running. But, you can get replacement springs and there are usually extra springs in the package. Attaching the spring may prove to be a trial. They are very small and one end is larger than the other so if you don’t get them on the two pegs on the shaft (the larger one is on the shaft) the spring may fly half way across the room and be lost forever.



One suggestion that works for us is to insert a small needle and thread and through the middle of the spring then attach the spring. If you don’t do it right the first time, you still have the spring with thread running through it. Once the spring is attached, remove the thread. (We have yet to lose a spring using this technique.)

Another popular knuckle coupler is made by McHenry. They require a draft box like the Kaydees but they have a different connection on the shank. There isn’t a metal lever in the draft box but there are two extensions on the shank that keep the couplers straight out.

These are a little simpler than the

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# Concentrated Card Order Session

By John Anthamatten

BBMRA member and Chief Engineer of the two foot gauge Veterans Memorial Railroad, Tom Keenan, recently ventured precariously North on I-75 to Flint, Michigan for a 3 day Concentrated Card Order Session. The great thing about the trip is that he invited me to go with him. It is a long day and a half drive from Tallahassee to Flint but we occupied most of the time with my picking Tom's brain about trains; any size trains.

Besides the two foot gauge, Tom is also a 1 1/2 inch scale owner. Most of you probably saw his locomotive on display near the HO layout at our annual show and sale this year. Tom's locomotive and passenger consist was stored in his trailer at our destination in Flint; there from a trip he made earlier this year. As we proceeded north I monitored the outdoor temperatures, waiting for the weather to cool below the 95 degrees temperatures we left in Tallahassee.

I expected it to get cooler as we traveled north because I had often heard summers up there are much cooler. I found that not to be true on this trip. It was 95 degrees when we got there, 95 degrees the next day and the only relief was the rain that came on Sunday afternoon. Also, we encountered "air that you can wear" that we believed we left in Tallahassee. Later, looking at a map of Michigan, I realized that most the State of Michigan is surrounded by the Great Lakes thus a good reason for the higher humidity.

## MICHIGAN CENTRAL & PENNSY

The location for this meet is two adjoining home site properties. The first layout is modeled after the Michigan Central Railroad and is built on 15 acres. The adjoining property is 10 acres connected with its own switchyard and is modeled somewhat after the Pennsylvania Railroad. Another member is currently negotiating to buy a third adjoining 10 acres and is hoping to connect his future layout to the two existing layouts.

The two developed properties have

over three miles of mainline 7 1/2 inch gauge track incorporating well over 250 switches. Most switches are manual and are operated by the train brakeman. Several are controlled by the engineer as the train approaches and will revert after a short time delay. The majority of the switches in the main switchyard are remote controlled. Most of the mainline, throughout the two properties is double track.

The two layouts have numerous cities and towns, most with multiple industrial and business sidings. Some have scale buildings in place and are lighted at night. Adding structures is part of an on going process. Numerous pieces of rolling stock are positioned throughout the layout and in the two switchyards. I counted over 100 units then I stopped counting. If it ever rolled on a prototype railroad then they probably have one.

There are tunnels, bridges, elaborate trestles and just about any feature one would find on a full size railroad. As with any model railroad, the layout is continuously under construction and expansion. The main switchyard for the Michigan Central is Detroit and the Pennsylvania yard is called Marion.

The dispatcher, in a tower at Detroit, controls all operations. Detroit switchyard includes a wye and an electric turntable to reposition trains. There are several large storage facilities for staging trains during inclement weather and overnight during sessions. Pennsylvania has a switchyard but no tower or dispatcher.

## CARD ORDER SESSION

For those of you who do not know what a Card Order Session is (and I did not) it is operating 1 1/2 inch, or any scale railroad, prototypically, using a system of car cards and waybills. More on that follows below. We arrived on location about noon on a Friday, unloaded the locomotive, engineer's riding car, one passenger car and the caboos from Tom's trailer.

Tom's passenger cars are flat cars with

three seats (similar to a boat seat) on each car. An adjustable, elevated platform is available for unloading/loading, from any type conveyance, and getting trains on the track. Most freight trains use a caboos to carry a small cooler, tools, rain gear and other necessary "stuff." Tom requested a "free run" through the entire layout to familiarize me with the two systems.

When we completed our free run Tom requested and got a conductor, an avid HO scale gentleman from South Florida that runs card sessions on his HO scale layout. He attends numerous 1 1/2 inch meets but does not have a 1 1/2 inch train. Our conductor ordered us a ten car consist to run as a local freight. The requested consist was built in the switchyard and a yard switcher positioned it for our pickup.

Our engine, engineer's riding car, the conductor/brakeman car and the caboos made a train with 14 units. We departed Detroit yard mid afternoon and then the fun and the work began. Each car has a laminated description card (often called a car card) listing the car type, company or industry name, color and car identification number. There are a number of identical cars with only the unit number being unique. Included in a pocket of each card is a laminated "waybill".

The waybill lists the city and industry or business where the car is to be delivered. The conductor must check his cards carefully because a train may have a multiple car drop at a location. Issued along with the cards is a clipboard with a laminated layout map on the front side and the passenger train(s) schedule(s) on the backside.

Conforming to prototypical operation, passenger trains always have the right-of-way. The local freights must be off the mainline for through operation of the passenger units. As you can tell, we are going to operate as close to real as possible. At each town location there is a box in which to deposit the card(s) for the car(s) being dropped. Cards for incoming units are placed to the back of the box and an equal number of cards are drawn from the front of the box.

Each card is the description card for a car already at that location and includes a waybill naming the business location

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Don't miss a chance to dress up your layout. People and objects bring your layout to life for the viewer. Besides, the real modeling fun begins the moment you've got your tweezers and magnifying glass out!

of the car to be picked up. Most conductors will draw cards before he drops his units to prevent the possibility of placing his car(s) in front of the pickup(s). This often eliminates having to move his cars twice.

Town locations have one to four sidings with as many as four industries or businesses per each siding. That is a possible 16 locations from which to leave or pickup cars. Most all sidings had cars stationed at businesses and industries. We ran for several hours, dropping and picking up cars, took a dinner break, and then continued with our task.

Because of multiple local freights operating at the same time we had considerable wait time. We arrived back in Detroit yard about 10:30 p.m. with a ten car consist. A train should finish the run with the same number of cars with which it started. This method is a deviation from prototypical but is done to keep a consistent number of rolling stock in the switchyard to build consists for other trains and for the next days operations.

Occasionally, a train will drop or pickup the wrong car. This error will be corrected by the offending train, if time

permits, or by another train the following day. Conductors have to check and double check drops and pickups to prevent mistakes.

Further, in keeping operations prototypical, the conductor is always in charge of a train. The conductor notifies the engineer of the city or town name for each drop or pickup, when to go and when to stop. A most important task for conductors is figuring logistics for drops and pickups to minimize the number of movements at a location. He also must watch the time to keep his train out of conflict with the passenger trains.

The brakeman is responsible for cutting a car loose, watching for proper coupler connection or disconnection, attaching/detaching brake lines, setting wheel chocks, throwing switches and other tasks required by the conductor. Friday evening Tom was the engineer and I was the brakeman.

*John will return next month to conclude.*

## Executive board reports

### Larry Benson, **Secretary**

The August 16, 2005 membership meeting was called to order by President Barrett Johnson at 7:40 p.m. in the Myers Park Community Room with 34 members present. Minutes of the July 19 meeting were approved.

After the Treasurer reported, division directors gave reports about their activities and future plans. The business portion of the meeting was adjourned for the Photo Contest and Swap Meet. Eric Ecklund won first and second place in the Model category; In the Prototype competition, Barrett Johnson won first and John Anthamatten second.

*The September 20th meeting will be at 7:00 p. m. in Program Room A of the Leroy Collins Library.*

## News & Notes

Thank you to each of this month's contributors! The year is marching along and behold! our stash of material is running out. Please start sending in your news, notes, articles and photographs right now. Your support is greatly appreciated.

Final word on the meeting location. Please keep in mind we're starting earlier in the main library's program room.

### **Announcement:** New Railroad Modeling Group

BBMRA club members are cordially invited to join a new hobby group devoted to modeling the citrus industry. The group is the Citrus Industry Modeling Group and is located at <http://groups.yahoo.com/group/citrusmodeling/> on Yahoo.com. Membership is free.

Sidenote: If you're looking for online resources, search for more Yahoo! interest groups or start your own.



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Post Office Box 3392, Tallahassee, FL 32315

## Layout Tour Cancelled! Look to Spring 2006

### NEXT MEETING:

7 p.m. at Leroy Collions Library

Program Room A

[www.bbmra.org](http://www.bbmra.org)

### Upcoming events

#### September

9/17-18

Wiregrass Train Show  
Dothan, AL

9/20 • 7:00 p.m.

BBMRA Meeting  
Leroy Collins Library  
Program Room A

9/24-25

Rail Fair  
Duluth, GA

9/30 – 10/1-2

H&R Train Show  
Pinellas Park, FL

#### October

10/7-10

NMRA/SSR Convention  
Lakeland, FL

## Couplers

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Kaydees. But, the shaft is made of plastic, so they're not as strong as Kaydees but you can still pull a 30 – 35 car train with them if your layout is that large. They have a spring like a Kaydee so the same needle and thread trick mentioned earlier.

A third kind of knuckle coupler is made by Easy Mate. The shaft is exactly like the McHenry's but the knuckle doesn't have a spring, but rather a piece of plastic connecting the shaft with the knuckle.

Our experience with these shows that once this piece of plastic breaks, the coupler has to be replaced because it won't close properly. But, these are quite a bit cheaper than the Kaydees or McHenry's.



In conclusion, a few special notes. Both the Kaydees and McHenry couplers come with special needs. There are long shank couplers for some passenger cars (we've had to use them on a couple C7

B units too) or "off set" high and lows for coupler height requirements. We'll discuss height requirements in our next article. Happy Model Railroading!

*Dan and David will join us in a future issue with more coupler talk. Larry Benson contributed to this article.*

### ON THE WEB <<<<

Some manufacturers have great resources on their sites to help you select your perfect coupler.

Micro Trains

<http://www.micro-trains.com/>

NMRA's note on Kaydee Couplers

<http://www.nmra.org/beginner/couplers.html>