

Vol 36 September 2020 MONTHLY PUBLICATION OF THE TURKEY CREEK DIVISION
OF THE MID-CONTINENT REGION, NMRA
"For all gauges and all ages"



Turkey Creek Division is planning an in-person meeting at the First Baptist Church of Kansas City, Tuesday, September 22nd. Greg will also discuss the construction details of a station model he is building for the Lawrence Model RR Club. Due to Covid19 restrictions, we would like to know how many members and guests would like to attend. Please respond to this email by Monday noon, July 27th, if you plan to attend. You can contact Greg Ohlmacher, Superintendent, at gcohlmac@sunflower.com, if you have any questions. Thank you and stay healthy.

Greg Ohlmacher

Members of Turkey Creek Division please let us know if you will be coming to the meeting on July 28th by Monday July 27th.

Louis Seibel Membership Chair Turkey Creek Division 913-927-6850

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FACE MASKS REQUIRED!

Your Calendars ...

Bring You

2020 Turkey Creek Division Modeling Challenge by Larry Alfred, MMR

Here we go again! For the 17th Annual TCD Modeling Challenge, the theme remains at "No Limitations"! You may build and enter anything, yes...that's anything, that will fit through the meeting room door!

To begin, we all know of the challenges we are seeing in our lives due to the Covid19 virus. Nevertheless, The Turkey Creek Division will go forward with this annual event...recognizing that there may be a drop off in the number of entries. That said, I hope that many will consider showing some of the modeling projects that I'm sure we all have been working on during these last 6 or 8 months. A reminder here...all in attendance at the meeting are expected to wear appropriate masks. For those that choose to participate by online connections, if all goes well, you will be able to view the entries and place your votes in appropriate categories. We'll see how it goes.

So, with regards to the event itself, what exactly does this mean for those planning to bring an entry? What it means is that you will not have any excuse (other than maybe Covid19) for not participating in the event. Let me emphasize here that the Modeling Challenge program was conceived to encourage everyone to participate in the enjoyment of building and displaying railroad models!! Please don't feel overwhelmed, intimidated, or...that you don't have time to join in. It is hoped that by participating you will feel a sense of "inclusion", that of being "one of the group."

You may ask yourself, what sort of model could I enter? First, let me make this clarification...entries need not be constructed especially for this event. If you have something that you built in the past, please consider entering it. Or, if there is a new project that you have started, but not finished, please consider bringing it. You could limit your entry to a single car or locomotive...remember any scale or gauge is acceptable. That's z scale to live steam! You could also consider entering your favorite entire train. Alternatively, you could focus on structures and enter a single structure or a full scene with several buildings. Remember, there is no limit! You might want to build a large or small display or diorama with basic details or highly detailed. Whichever, this could be an opportunity to build a component of your home layout, to be incorporated into the layout later. Several of the past entries have been used in this way, to a great benefit of the modeler. Possibly, the ultimate entry could be an entire operating layout (albeit, somewhat small...remember, it must fit through the door)! This is intended to be a fun filled event, with the entry possibilities only limited by your imagination and enthusiasm to participate.

The judging will be by popular vote, so crowd appeal will be important. The event will take place at our September 22nd meeting, so you have a few weeks to finish preparing your entry. There will be three places awarded for this challenge, plus awards for the "Best Sound/Animation", and the "Best use of the TC Make & Take Model". In addition, we will present the "Red Bull Award" for the most whimsical entry. But, again, I want to emphasize that participation is the important aspect of this program. So, if you're interested in being involved, bring an entry. This will be another fun event!

Superintendent's Report

Fellow Model Railroaders. I want to thank everyone who has pitched in during the pandemic. The division had a virtual meeting early on and has followed it with two meetings with both in-person and virtual attendees. There have been some glitches. We had some technology issues before the last meeting, but we got it worked out. At least, I assume that the people watching the meeting on Zoom had more than blank screens. The next three meetings will be both inperson and virtual. If you plan to attend in-person, please notify me or Louis Siebel.

I want to thank Miles Hale for presenting a clinic on the technology needed for creating videos for posting on social media sites. Miles runs Model Railroad University on YouTube. In his presentation, he discussed types of cameras, positioning, audio and a host of other topics.

For September, the division will have its annual model challenge. Larry Alfred has offered to run the meeting again this year and will have more information about the event later in the Lightning Slinger. I plan to bring a model or two to display. The virtual attendees will not be able to show models, but they will be able to see the models and participate in the discussions.

For October, the division was originally going to do a judged modeling event. When we discussed doing this, it was a replacement for the model contest at the division train show. It was to be open to the public. At the August meeting, we threw out the idea of just using a regular meeting and not opening it to NMRA members outside Turkey Creek. I was talking with one of our members, and he voiced some concerns about this approach. I will not have a meeting dedicated to judging but that I will present a clinic.

I am actively working on Achievement Certificates and a supporter of the Achievement Program. I want it to be known that if you need items judged, you have several options. You can bring items to any meeting. Please let the superintendent know in advance, so the necessary judges are on hand. We also can arrange to meet someplace in the evening or weekend to have your models judged. Again, contact the superintendent to get the process started. The division still needs a clinic for the November meeting. In December, we will have a social event.

Superintendent: No one has offered to step forward to be superintendent next year. Folks, it is not that hard of a job. There is some paperwork that needs to be done early in the year. We have a wonderful group of members that are willing to help. In October, I need to present a slate of candidates and in November the division will vote on the new officers. Steve McKee (Clerk) and Bill Humenczuk (Paymaster) have agreed to continue in their current positions for another year.

Larry Diehl has taken over the production of the Lightning Slinger on a temporary basis. I would like to thank Ted Tschirhart and Louis Siebel for their past work on the Lightning Slinger. Please consider contributing articles for the Lightning Slinger to Larry. Also, the division will need to find someone to step in as editor. Please consider helping the division with this important position.

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Turkey Creek Division Is a 501(C)(3) ORGANIZATION

Lightning Slinger September 2020 Page 2

August 25, 2020 August Clerk Report

Our Superintendent Gregory Ohlmacher called meeting to order. I think we had about 9 people.

Miles and Fran Hale put on a clinic on using cameras to put a clinic on zoom or other media. Miles went over the camera's he uses and what their advantages are. He covered different lens that come with the video cameras and shows examples. We also got to see firsthand how important it can be to bring all your own equipment instead of using other peoples equipment.



There were a few moments where they had a hard time getting Miles equipment to match up and work with the equipment the church had on hand. We had Richie there to help out and he seems to always be able to get things working. That guy really has a knack for that sort of stuff and he had Larry Diehl there for his backup.

One thing we noticed that I want to pass on it how important it is for all of us to hit the mute button on our computers when we sign into zoom or any other type of video program. All of us there could hear everything going on in your house. Prime example was Louis Siebel didn't hit the mute button even after I had asked him to do so. I'm sure he just didn't hear me because of the noise at his house. You could hear kids yelling in the background and others yelling back and forth. That comes thru load and clear at the church and I'm sure it did for people who were watching from their homes. Nobody wants to hear somebody else's kids screaming in the background. I'm sure they are cute to you but nobody else tuned in to hear your kids or grandkids. So please hit your mute button when you tune in unless you are talking to somebody else on the program.

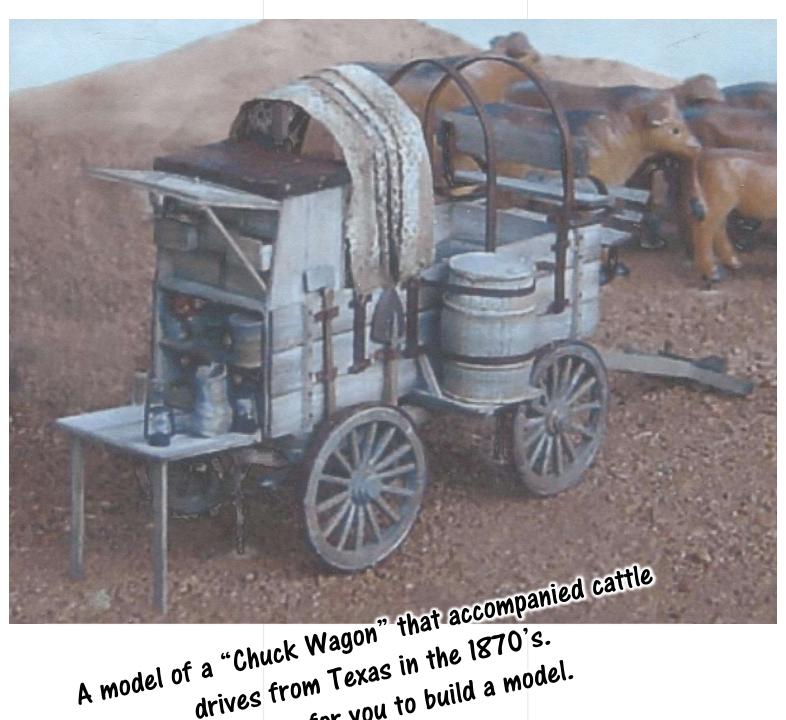
I do have to say the church does have a very good device for conference calls. It picks up everything in the room and has a good speaker so we can hear everything at your end also, even if you just cough we hear it load and clear. Enough of that. I'm looking forward to our next broadcast and hopefully they will have a vaccine for this virus by year's end from what they are saying so we can get back to normal again. We miss seeing everybody's smiling face.





TUESDAY, SEPTEMBER 22, 2020

...coming to you from the heart of the BitterRoot Mountains...



drives from Texas in the 1870's. Inspiration for you to build a model.



Volume 20 - Issue 3

TUESDAY, SEPTEMBER 22, 2020



Duluth Plumbing Wholesalers

25th Anniversary HO Scale Craftsman Kit Designed and Manufactered by Brett Gallant in the USA

FORKS CREEK CURRENT

VOLUME 15 A RANDOMLY OCCURRING PUBLICATION By: Ron Morse, MMF

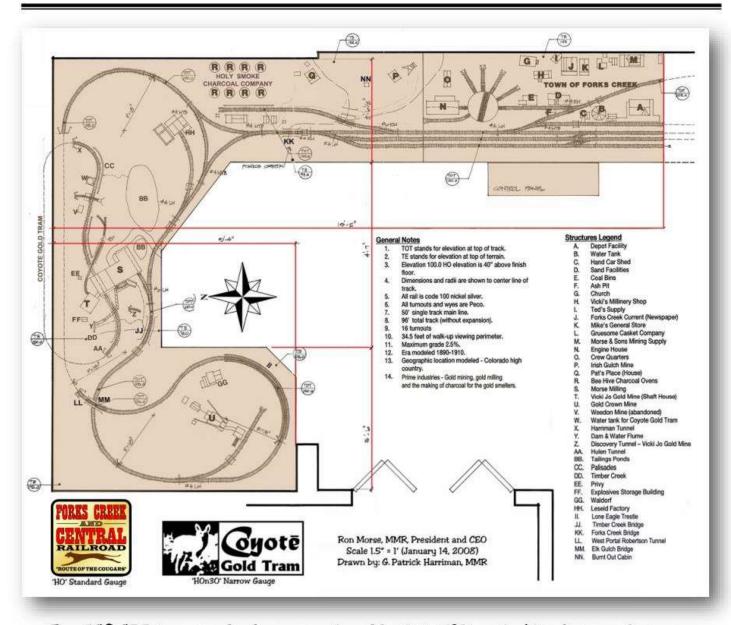
OOPS....One step forward and five steps backward.....It dawned on me that the freight dock on the freight depot should be about rail car high and mine is only track high....so back to the drawing board. Fortunately it was glued down with white glue which if you spray it with water it easily comes up :0) So I got a flat car model out to check for height and width. I have moved the building positioning blocks back about 1/4" which according to the NMRA Gauge stills leaves enough room for the train to go behind it. Now I have to raise the building as well...



A little bit about adhesives for wood, paper or cardboard models

- I use white glue a lot as I can undo something if I need to. But, if you use it on a structure and then use a water based stain or paint on it ...it will likely fall apart.
- Yellow glue is water resistant. Some varieties are waterproof.
- Five Minute Epoxy is a good choice for a waterproof bond.
- Super Glue works very well and is VERY quick especially if you use "Kicker". However, kicker will dissolve the ink on pictures printed with an ink jet printer..
- Other glues can also be used such as "Goo" and "Tacky Glue".

FORKS CREEK & CENTRAL RAILROAD



- The FC&CRR is a standard gauge railroad built in 'HO' scale (the distance between the rails is a scale 4' 8").
- The era modeled is 1900 in the Colorado Rockies.
- This layout was featured in Model Railroader in June of 1998 and in Scale Rails in August of 2008.
- The Forks Creek & Central Railroad has been under construction since 1983 and is 99.9999% complete. Approximately 4,160.50261 man hours have been spent building the railroad.
- The layout uses conventional DC and is operated from a central control panel using three transistorized throttles (built by Dean Windsor, MMR).

LITTLE ELLA MINE AND MINE CAR

On occasion (n my teens) I helped my grandfather in his gold mine at Fall River, Colorado. He also had a mine at Sugar Loaf (Boulder area). My grand-mother used to get really mad at him as he always had a case of dynamite in the trunk of their car (about every couple of weeks or so they went back and forth between the two mines....and he needed dynamite at both mines but he didn't want to leave it unattended as they had a number of break ins.)!

Here I am in the mine car at my grandfather's mine (the "Little Ella") at Fall River, Colorado. Based on research of the brass name plate it was made in about 1900. So it's at least 120 years old.+.

Here is my grandfather (Art Boettcher) preparing to dump some "muck" from the mine in about 1954.







Trade catalogs - F. M. Davis Iron Works Co.

1800s-1900s

F. M. Davis Iron Works Co.

Denver, Colorado, United States

Notes content

Mining and milling machinery: roasting furnace; stamp mill; concentrating mill; cyanide mill; steam pumps; steel tanks; vacuum chambers; iron fittings; chain belt conveyors; revolving screens for dry screening; drying pans; settlers; crushing rolls; elevators; ore feeders; etc.



Lightning Slinger

Turkey Creek Division



September 22, 2020

More

One recent Sunday

afternoon, I'm talking with an old friend/client from 1980, David B. When talking of things!, I mentioned the Ray Brown article on wagons and David replies, "Did I know Don and Connie Werner of Horton, Kansas has a very special "rare" business, constructing old pioneer wagons! "Really" I say!

I soon talked with Connie and she allowed Ray Brown and myself to come visit on Labor Day Monday to view, visit and photo their construction shop.

What a find!



What quality work Don does! He builds everything from scratch! Craftsman ship at its finest!

Wagons.

These are very close replicas, custom built and finished to customer wants.

Currently working on a military funeral wagon. Very pretty, very nice. Don expect it to be used for funerals of commissioned officers at Fort Leavenworth, Kansas.

It will be complete with fringe around the bottom!

Highly glossed black paint.



Don and Connie recently delivered a replacement Conestoga wagon to Oklahoma University. (They crashed their celebration football field wagon last year, due to poor student driving at excessive speeds.)

To be used at their football game, Saturday, September 12th at O.U.!

No Photo

Don and Connie also built this wagon used in President Obama's inaugural parades in Washington D.C., twice!



Currently in their shop:



Cart





Stage to be refurbished



Their Wheel Shop:







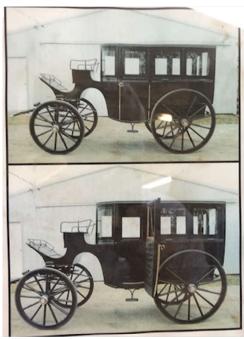
Their shop







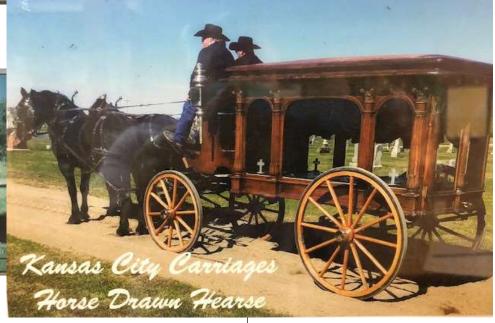










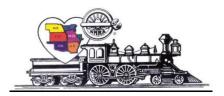






If you ever need such a wagon, stage, buckboard or cart, or know someone who desires such a wagon, don't hesitate to call Don and Connie. I'm sure it's a few dollars, you won't be disappointed!

Larry Diehl



Lightning Slinger

Turkey Creek Division



September 22, 2020

.and Even

Well... it seems that Ray Brown is not the only "crazy" amongst us!

Marty Vaughn also has the disease!

Marty models "N-Scale" so his collection may not take as much space, but the detail reveals it has obviously taken as much time to build!

Marty has also built "pioneer wagons" for travel west ...across the Santa Fe and Oregon Trails... similar to the Conestoga wagons used by pioneers during the Westward Expansion.

by Marty Vaughn, MMR Intro by Chickenman Larry

Remember, these wagons are "N-Scale"!



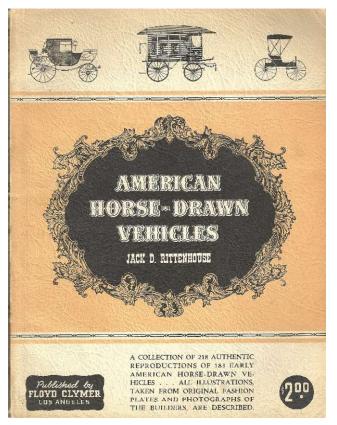
Marty writes:

Assuming that there are more people than just Don Bronec and I who are interested in modeling the pre automobile era in N scale in the Division, I thought I'd mention some more details on wagons and point out some HO and O scale wagon kits that also great models to build and I've built them all in both scales as well as some N scale models. You won't find any mention of etched brass kits here because I've yet to be able to build one that looks like a wagon, so I'll stick to what I like best.

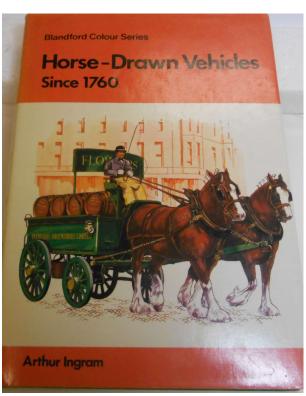


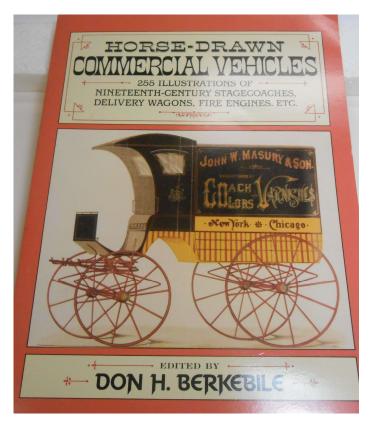


While there are an incredible number of wagon photos on the internet, I'm still a hard copy kind of guy. There are as many different wagon types are there are motor vehicle types and some of my favorite sources are these two that I purchased on eBay The first is a book and second a DVD of old catalogs (and yes, Sears and Studebaker both also sold farm wagons):





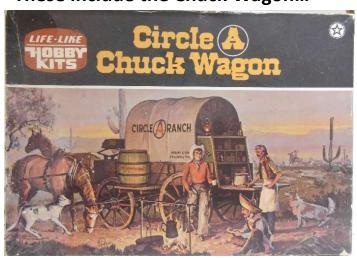




All of the books and the DVD were purchased on eBay but I suspect the books could be found through a used book dealer like Half Priced Books or perhaps even Amazon. These two books below are also useful and have drawings of some really unusual wagons.

Starting with some O scale wagons, these have been around for a long time and produced by a number of companies including Athearn when they produced O scale. These are on eBay most days and I've heard that they are going be re-released in the near future by a new company who bought the molds and the rights to the kits. The original company that made these kits also made the well-known (and we all probably had at least one) 20 Mule Team Borax Wagon kits.

These include the Chuck Wagon...





The Freight Wagon...



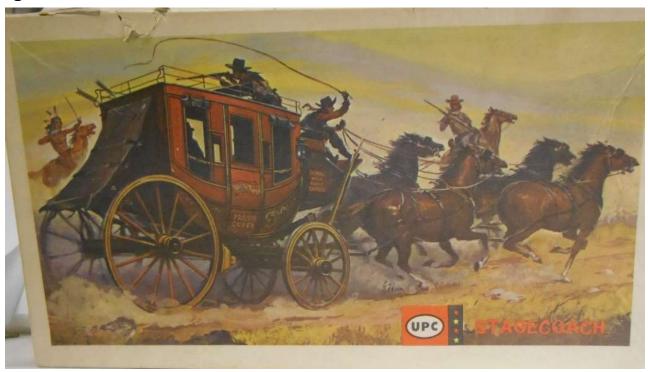


The Covered Wagon and Delivery Wagon...





and the Stagecoach...



There is also a line of horse drawn Fire engines, but these are much rarer and more expensive because the molds were sold to a Brazilian company who later sold them to a Revell in England and the ship carrying the molds to England sunk and they are currently somewhere in the bottom of the Atlantic. If you want one and you see one, be prepared to pay whatever they want for them.



In HO scale there are two sets of wagon kits that I've built and sold a lot of that I'd recommend too. Again, these are produced by a number of companies and are still in production and you get them on eBay for about \$10 if you shop around and each kit contains two different wagons. The wagons appear to be direct copies of the O scale wagons above that were scaled down

when the molds were made. But be warned, the driver figures and the horse and ox teams are wildly out of scale. Some of the drivers are HO but others are so small I use them in N scale and all of the horses and ox should be replaced. The wagons on the other hand, while not exactly in the same scale as each other all work well in HO.

These include the Covered Wagon and Stagecoach...









There is also the Surrey (which can be converted to a Buckboard) and a Fire Engine...









Scratchbuilding Materials...

When I first started modeling in N there weren't many N scale wagons available. Scratch building wagons didn't bother me, but wheels were a problem. I had built a number of Jordan kits and knew some of the smaller wheels would work in N. I actually wrote the Jordan company back then, when it was still run by the father, not the son and asked if they would sell me just wheel sets explaining I was modeling in N scale. I got a small package back in the mail from Mr. Jordan and when I opened it there was a note telling me that he wasn't interested in selling wheel sets separately and below the note were about 100 pair of assorted Jordan wheels. I've used a lot of those wheels and still have a few pair left and I always had a warm feeling about Jordan kits.



"Hay Rick"

modified Jordan kits

My first effort was a hay rick and it was built using a Jordon HO baggage cart straight out the box on the left. I realized it sat too high so I made another widening the wheels and putting the bed between the wheels in the middle one in the photo. From there I used another cut down baggage cart with different wheels and made the buckboard on right. The dash board is simply a section of the body cut off and glued in place with styrene strips. Yes, wagons had dash boards. They were made so that you would have a place to brace your feet when you tried to rein in a horse or team that "dashed away". That's also how you ended up with a dashboard in your car.



Pendraken models

I also started looking at other sources of wagons. **The three above are from Pendraken** a British company who make items for 10mm (N scale) war gamers. The first two on the left include detachable canvas cargo covers. The first is from a Boer War supply wagon, the middle is a WWII German supply wagon and the one on the right is an American Revolutionary supply wagon. They are relatively inexpensive, but they are all cast pewter so the postage costs are a pain.

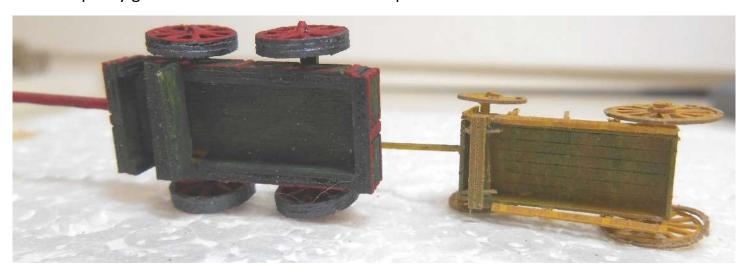


Pendraken Pendraken Franco Prussian

These three are also pewter castings. The first two are more of Pendraken, a Franco Prussian supply wagon and another Boer War wagon.



The wagon on the right is a Musket Miniatures Rustic Rail ox drawn wagon. Rustic Rails line includes box wagons, covered wagons, flat bed wagons and even a delivery wagon. Most can be purchased with horse, mule or ox teams for motive power. While Musket Miniatures is out of business, their entire N scale Rustic Rails line was purchased by MCoR's own Allen Pollock and are available on his Scalefigures.com web site. Full disclosure, if you buy a painted wagon from Allen, there's a pretty good chance that I'm the one who painted it.



There are also two companies that make laser wagon kits in N scale that I know of. The first has no name and are only available on eBay that I can find. The wagon on the left is one of their kits. It includes bows to make a covered wagon but the bows go inside the box instead of the outside. The John Deere wagon on the right is and RSLaser kit. They make a delivery kit also and make kits in N, HO and O. I've shown the view on their side because my only issue with both are the wheels. The "unnamed" company wheels are too thick and should be sanded to at least half the thickness and the RSLaser are too thin in my opinion, they are pretty fragile. They also make a set of laser cut three-part wheels as shown below.



Another war game company that makes a wagon is GHQ. These are pewter and only available in N scale. The wagon on the right is painted for the U.S. Army and was used in this paint scheme during the Civil War right up to the end of the frontier army. I guess they didn't want anyone stealing their wagons. As used in the war the driver rode the left wheel horse or mule. The wagon on the left is the same model I kit bashed with a seat added over the front tool box. The model comes with six harnessed mules.



Preiser makes wagons in both N and HO, but in N it's just a deep box farm wagon and a hay rick. The farm wagon comes with no seat and in two wheel sizes as you can see in the three wagons on the left. The two wagons on the right are the same wagon with different wheels. The one on the far right has HO Jordan wheels. All the wagons have seats added to the box, some on top of the box and some on the front. Some of the seats are scratch built, but for others I take a Model Power park bench and cut it down in width to fix the box. With a little disguising no one has noticed – until I just gave away my secret – oops!



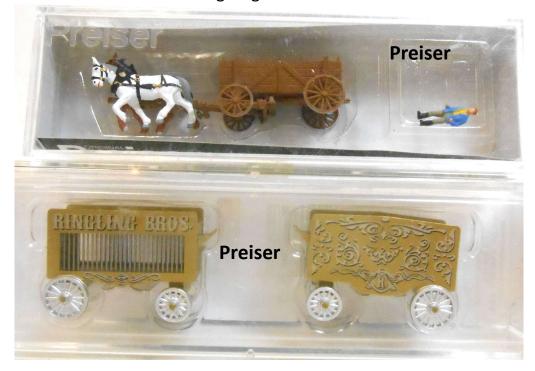
Preiser



Note: the substitute wheels

The Preiser wagon in the box is shown below along with the Micro Trains Circus

wagons. The MT trains are a bit pricey and only come with fancy circus wheels and are meant to be a flat car load so none have wagon tongues. They are nice but would take some work and a team of horses to be used as a working wagon.



Another British company that makes wagons is Langley. The wagons are cast pewter kits. These two are my favorite of their line. While the fire engine pumper isn't exactly like the American prototype, it is to my knowledge the only one available in N scale. The delivery wagon on the right sits a bit high but the style is typical of all sorts of delivery wagons. The model is actually a very close ringer to a newspaper reporters wagon used as a base of operations and to sell papers to Union soldiers during the war.

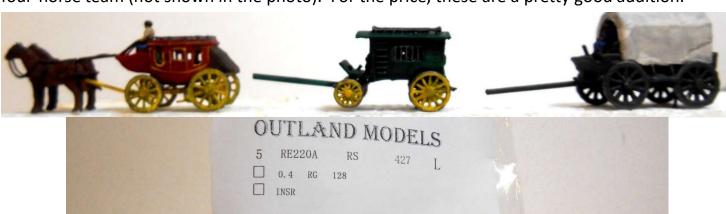






Langley

Another new company producing wagons in Z, N and HO is Outland. This is a Chinese company selling 3d printed wagons on eBay. In Z and N they are sold in sets with one each of the three wagons shown and in HO just one wagon. These are all one-piece printings as you can see in the second photo. It is a bit of a challenge to cut them free from the sprues without breaking anything. The green wagon has a sprue that connects to a stirrup step below the driver's seat and in three attempts I failed every time to remove the sprue without breaking the step. On the other hand, you probably wouldn't know that if I hadn't told you. I do think that the wagons come "under powered" so I've removed the one horse attacked to the green wagon and the covered wagon and added a wagon tongue. Those two horses are them added to the stage to make a four-horse team (not shown in the photo). For the price, these are a pretty good addition.





If you're modeling the era before automobiles you just about have to have a stage. **These three N scale models are from left to right an Outland 3d printed model** and 3d printed model given to me by a customer in France, so I have no other information and the one on the right is scratch built using Jordan wheels. My scratch-built stage is a little bit big, but I built it based on the size of the wheels. It's probably closer to 1/144 scale, but I'm using it anyway!



Outland 3D printed models

One of the biggest problems with building wagons in N scale has been a source for wheels. You can mold someone else's wheels, and I have, but in N I still lose a lot of castings because the spokes are so small. Then I discovered this HO Preiser set of baggage carts. This sells for about \$15-\$20.



But for that you get three different sizes of wheels, potentially four wagons right out the box and four carts. The box on the two side walled baggage carts are close enough to the size of a farm wagon I don't even bother to narrow the bed. The buck board, third from the right only has a seat added and a wire added to the bed to keep "stuff" from sliding out. The green wagon is straight out of the box with a seat added (and had a wagon tongue until I broke it setting up to take the photo- of course). The red and brown wagons on the left used the cart body from the kit, again with the seat added and the blue wagon has two cart bodies with one end wall removed from each and glued together to make one longer wagon bed and the seat added.



Preiser Models



Carts...

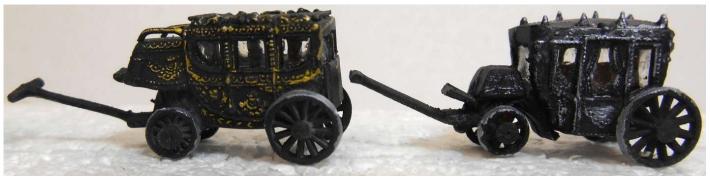
And don't forget carts. Carts were used everywhere. They were cheaper than wagons and were much easier to move off road. I've read estimates that 40% of the traffic on the Santa Fe trail was carried in carts. The first two carts are from the Preiser baggage cart kit and the one on the right is a Pendraken pewter model.



Preiser Preiser Pendraken

Carriages...

Then you have the odds and ends of wagons. A long time ago I purchased some plastic war game carriages from an unknown manufacturer. I did use some to make carriages, but you can only have so many rich bankers, mine owners, cattle kings and madams in any town. The carriages are pretty simple and some are extremely decorative. Two of the most highly decorated had the closed backs that I opened to make doors and they now represent the hearses used by the undertakers in town. I suspect I'm going to have to have a big boot hill as there is another hearse currently under construction.



War Game Carriages - acquired

Other than a hearse and a stage I do have some other people movers. The carriage on the left below is a straight out of the box Preiser carriage and they are expensive so it's likely the only one I'll have. Both the hooded buggy and the surrey are scratch built using plastic, floral wire for the horse poles and paper for the roofs. The wheels are commercial castings, but I've had them so long that I have no idea now who made them.



Preiser Scratchbuilt

Grandt Line (and whoever purchased them) does make N scale wheels, but they are only two sizes, 36" and 48" (in scale). But you can look at HO for some wheels too. With wheels you can build just about any thing. The three wagons below are all scratch built except for the wheels. The brown supply wagon has HO Grandt line wheels that I sanded down the width to about half or less of what they were to look better. The diameter works, but the thickness of the wheel is too big for N without sanding. The green farm wagon and the water wagon are scratch built but use just regular Jordan HO scale wheels, part of that supply Mr. Jordan sent me.



Scratchbuilt w/Grandt Line wheels

Scratchbuilt w/Jordan wheels



Scratchbuilt w/Jordan wheels

These are more of the **scratch built wagons** and these are all using sanded down HO scale Grandt Line wheels The wagon on the far right is a Connestoga wagon. These wagons were huge, usually pulled by oxen and a full wagon required 4-5 pair of oxen to pull them. I have learned to avoid so many wrinkles in the canvas cover since I made these. Cut a tissue or fine paper napkin (with no texture) to size to go from wagon bed to wagon bed across the top. Holding just two corners (tweezers work well for this) dip it in diluted white glue and water tinted with the color of acrylic paint you want the canvas. Then holding it just by the ends on one side drape it across the top of the wagon bows and cinch it together at the front and back. The ones in the photo were applied dry and then lightly brushed with the diluted glue and paint mixture and they wrinkle more that way as you can see. You only get one shot at this so if you mess it up pull it off while still wet and cut another piece and try again.



Scratchbuilt wagons with modified Grandt Line wheels



There are some local wagons at the Mahaffie Stage Coach Stop and Farm. They have both a Stage Coach and a farm wagon. If I remember correctly both are replicas, but both are full size. The farm wagon is also the same dimensions are the wagons used by the Union Army during the Civil War and after, right up into World War I. Most farm wagons added a bench seat to the front of the wagon and dropped the wooden bows.

Next month I'll show you a cheap and easy way to add harness to any bare back horse to pull your wagons. And I've used it in N, HO and O scale.



Prototype Wagon Dimensions

The following prototype dimensions come from actual measurements taken from wagons at the Mahaffie Stagecoach Stop and Farm Historic Site in Olathe, KS. The Mahaffie Stagecoach stop was the first stop southwest of Kansas City on the Santa Fe Trail.

Concord Stage Coach:

Rear Wheels diameter - 58" Front Wheels diameter - 44"

Body:

Height: 58" Length: 86" Width: 43"

Front Boot: (where the driver sat and the space below the seat for valuable cargo)

Length 40" Height 40"

Windows: None of the windows have glass they are just openings in the stage body. They did have leather shades that could be lowered over the opening during bad weather.

Large Window: (The bottom of the large windows slope up and out, the dimensions are from the bottom of the "inner" side and the bottom of the "outer" side of the window with the inner being closest to the center of the stage.)

Out Height 27" Inner Height 24"

Small Window

Height 8" Length 6"

Door: Height 48"

Width 24" Door Window

> Height 15.5" Length 19.5"

Rear Boot:

Length at Bottom 44"

Length at top should be about the same, but I was unable to take that dimension.

Metal Hangers: These are the metal brackets that the leather straps attached to the bottom of the stage body are fastened to on the stage running gear. These straps are the leather springs for the coach body.

Hangers (one in each corner) 24" tall

Tongue: 13' from front tip of tongue to front axle **Brake Handle**: 6' long from end to end

<u>Farm Wagon:</u> Many companies, both local and national built wagons so there is some variation, but this is close to the accepted size for a standard farm wagon. This was determined in part by how big a load a two-horse team could pull comfortably. This particular wagon is marked "Roybuilt"

Front Wheels: 42" diameter Rear Wheels: 49" diameter

Body width: 39"

Body Length: 10' 6"

Front Toolbox: 8" deep, 8" tall and 39" wide

<u>Army Wagon:</u> There were several manufacturers of Army wagons also, but these dimensions are close to normal.

Front Wheels: 46" diameter Rear Wheels: 54" diameter

Body width: 39"

Body Length: 11'

Front Toolbox: 12" deep, 12" tall and 39" wide





Websites & Manufacturers...

Scale Figures.Com – N Wagons and Figures in N HO S O G and larger http://www.scalefigures.com/

RS Laser Kits – N, HO, S, O Wagons only http://www.rslaserkits.com/index.html

Farm and Deliver Wagons. These are nice reasonably priced kits.

Pendraken Miniatures – N only but wagons, horse and ox teams and figures https://pendraken.co.uk/

GHQ - N only

http://www.ghqmodels.com/store/rebellion-miniature-accessories.html

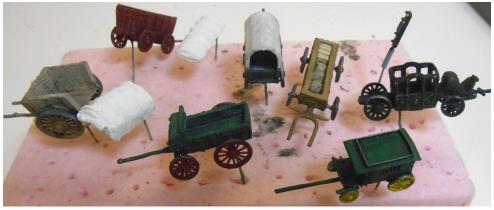
Mostly Civil War military figures but they have an excellent Army wagon with 6 mule team. The wagon would work in any western scene.

GME Laser kits – HO, S, O Wagons only http://www.g-m-e.com/laserkit.html

GME makes a variety of laser cut wagons, farm wagon, delivery wagon, gypsy wagon, log wagon, freight wagon, water wagon, sheep herder's wagon and dump wagon. Most, but not all wagons are available in the scales listed. If you saw the wood wagons on Pat Harriman's layout, most of his wagons were from this company.

Berkshire Valley O scale wagons horse teams and oxen https://www.berkshirevalleymodels.com/apps/webstore/products/category/1556428?page=1 I've built a few of these for other people, including Dave Jacobs. They make nice wagons, but do require some work.





Marty's Wagons

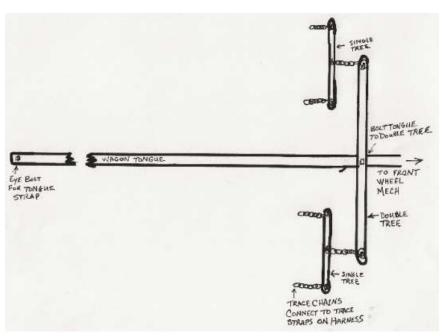




Wagon and Horse Harness 101

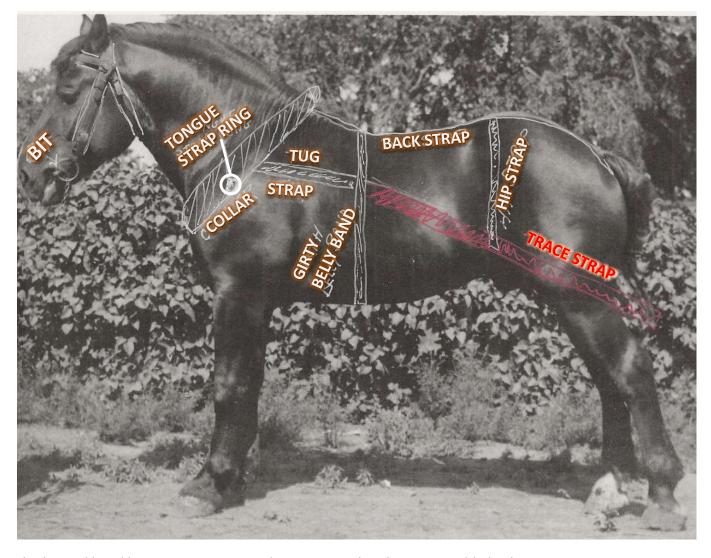
First of all, I keep the harness on model horses to the bare minimum required. There are only two basic types of wagon harness. The easiest for a one-horse wagon or buggy consists of two poles attached to the front wheel mechanism of the wagon. Each pole is strapped to the side of the horse at the Girth or Belly Band.

Once you add a two horse or more team to the wagon it gets a little more complicated. Instead of poles you now have a wagon tongue, which is just a lever that the horses turn to turn the wagon wheels. A two horse or more team requires a double tree which connects to the tongue, normally just in front of the front of the wagon. The double tree could be semi permanently mounted to the tongue for farm wagons but for stages or some freight lines where a quick team change was necessary it could be a simple cotter pin. For a quick change the pin was pulled the team was driven forward and the replacement team backed into place with a different double tree and pinned in place. Each double tree has an eye bolt connected by chain to a single tree. The single tree in turn has two bolts with chain attachments. These chains (aka trace chains) are connected to the trace straps that connect to the girth or belly band on the horse's harness. At the front of the wagon tongue is another eye bolt that connects by a strap to a ring in the collar of both horses. This strap keeps the wagon tongue from dropping and digging in and potentially spilling the wagon.





The harness drawn on the photo of the horse is about the simplest basic harness. But there are all kinds of different takes on harness. Basically, as Larry explained horses have weak necks and pull with their shoulders so a horse collar is required for anything larger than a light buggy or one-horse wagon. The tug strap connects to the girth or belly band. The back strap connects to the collar and wraps around the tail to keep it in place (and this is where there are so many alternative ways to hold this in place). The hip strap connects to the trace strap or trace chain. The hip strap keeps the trace strap or chain from dropping and tangling the horse's feet. Normally at this connection if a chain was used all the way to the hip strap from the single tree from this point to the girth or belly band it is a leather strap, both because chain was more expensive and leather was easier on the horse's belly.

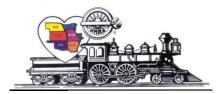


The bit and head harness is pretty simple as seen in the photo. It could also have a strap running across the nose and under the mouth.

One last point. If you look at horse collars in photos on horse teams you will see either brass "horns" or "eyes" at the top of the collar on both left and right. These aren't just for decoration. Those reins can get really heavy, especially if you have a four, six or eight team of horses or mules. Those horns or eye are used to thread the reins and keep them from drooping and getting tangled in the feet of the horses. And for you strap counters out there, I've used the names of the straps as my grandfather called them. There are other names for some, but it's the same strap. If you really want to get in the weeds on harness, just google horse harness or horse collar and spend the rest of the day checking it all out!

Regarding the horse used to diagram straps, that horse is Doctor Brinkley, a Percheron who took the blue ribbon at the Missouri State Fair almost 100 years ago. The horse was owned by the fellow in the photo who used Doc to sire breeding stock and raised Percheron's into the 1940s for farming. He's my grandfather, William W. Vaughn

Marty Vaughn

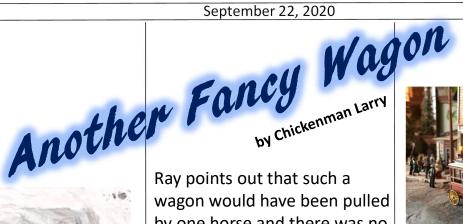


Lightning Slinger

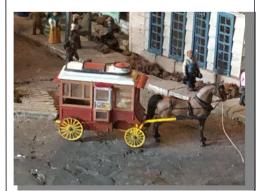
Turkey Creek Division



September 22, 2020



by one horse and there was no driver. A single "lead rein" comes off the horse for a "walking driver" to lead the wagon through the streets.





This makes me think it represents the first "cab" to run the streets of our great cities.

OR... maybe the predecessor to UBER!

Wagons on our models seems to be sparking more interest ...

Ray Brown was so kind as to build me a "fancy wagon" to run the streets of BitterRoot Canyon City ...





Ray says that it is a Jordan kit. The horse is Jordan.