

Chapter 1 : History - Broad Gauge Era Signalling Equipment

Wonderfully crisp black and white photographs capture I. K. Brunel's broad gauge locomotives at rest and flying across the countryside. Includes two essays by Rev. Malan (who took the photos), one on the general history of the broad gauge locomotives and the other a reminiscence of a trip on the footplate of one. 70 pages.

It is the reason you will always get it being quite popular among many users who wish to get a top performance shot gun. First of all, the manufacturer did a good job when it comes to the overall design. You are always going to like the way it looks and works. Since it looks and works great, you are always going to have a good time when it comes to using it starting today. Another thing you will love is the type of pump action you get with it. It is not like it is a new invention in the world of combat shotguns, but it is definitely one of the best. It comes with the best performance to ensure that it always works great as you want. The pump action also good so that it can work two different types of ammo on the fly. Those who have tried it out can tell you that it is one of the best when it comes to the overall delivery of the shots. You will also not have to change anything to keep the shotgun accommodating another load. You simply swap the load and start shooting. So, how is the reliability of this model? There is no doubt you are always going to have an easy time using it. It will remain shooting for a long time even if you get to use it more often. The good thing is that you can go through numerous rounds even before you have to do some maintenance. There is no doubt it stands out as something great for many people. Strong construction, delivers on reliability, works with different ammo

Cons: A few cases of jamming 20 Gauge Shotgun 7 Remington This model is one of the best on the market. One thing that stands out for it should be the pump action itself. The kind of pump action you get is one of the best to make the shotgun even more robust. It is also seen as one of the best combat shotguns you can get right now. Being a robust shotgun, it is less susceptible to the vagaries when using different shotgun ammunition types. You are also going to like it for having a lower recoil as compared to the many other models on the market. The manipulation of the action is also seen as simpler. Well, it can also depend on the shooter and not the ammo. If you have experience using the shotguns, you should then have a good time when it comes to working with this one. The interesting thing is that this model has been in production for 70 years now. Therefore, this shotgun has quite a following when it comes to having fanatics. Over the decades, the shotgun has evolved to be one of the best on the market. Those who have tried it always see the improvement from one model to another. Many shooters prefer this model for delivering on the best reliability and sturdiness. First of all, it comes with a solid steel receiver. This means that it can live up to the various expectations that many people might have in mind. The steel construction is great keeping in mind that other models would have alloy receivers. Many will always love what the model offers in terms of versatility. You might also find it common with bird hunters. Comfortable stocks, great design, highly durable

Cons: Low round capacity 8 Mossberg All-Purpose Field Just like most Mossbergs, this one also comes with some good features that makes it one of the best on the market. First of all, you will get to like the controls that you get with the model. The location of the controls should make it even better when it comes to the overall operation of the model. As a result, even the newbies will have a good time when it comes to using it. When it comes to the changing of the barrel, you will find the process being simple. This is because the manufacturer explains the process in the manual. You will definitely have an easy time when it comes to working on the process. You will simply have to pull the action down midway after unscrewing the magazine knob. Just like that, you can now pull the barrel. Another thing you will like about this model should be the range time. It has a rubber pad to help keep the shooting something simple for you to enjoy. You never have to worry about using it even more often. You also get that the recoil is considerably less. The model is also quite dependable. There is no doubt you will feel comfortable when using such a model. Since it can easily pass the test, it should then be something that you get for yourself today. Highly dependable, great accuracy, ease of changing barrels

Cons: It is also seen as reliable when it comes to using it as a home defense weapon. Another selling point for this shotgun should be its durability. You will also like the fact that it is highly dependable. It will always work each time you have to use it. It is definitely more as compared to the other models on the list. It comes from a

line of reliable firearms that you can enjoy using starting today. It is made to be corrosion resistant and also delivers on the best durability, which is something you can use. You will also like it as comes with a reduced recoil level. Best of the best When it comes to the best of the best, the Mossberg takes it all. This kind of shotgun checks all the boxes for being the best when it comes to owning a shotgun. Its popularity also makes it one of the best models that you can get for yourself right now. You will definitely enjoy using it starting today thanks to its affordable price tag. That being said, it does not mean that the 20 gauge is not so good. We get to check them out both just to understand what you get with the two. Starting with the gauge shotguns, you will always find that the ammunition is readily available. It will also come with more power. You can still be sure that this model will come with too much recoil, for this reason, it might not be liked by everyone. Photo by Helen The gauge model is also good when it comes to the large number of ammunition options and accessories on the market. As a result, the gauge model does not get a lot of love. You will also find that the gauge model is good for shooting different types of games. The same cannot be said for the gauge shotgun. That being said, the gauge sometimes is just too powerful for nothing. It is then when you need the gauge model. It is not just the power that is less, but also the recoil. As a result, it is going to be an easier gun to shoot more often. The gauge shotguns are often more compact than the gauge shotguns. They are often similar in price and range. You will always find that it is possible to fit more rounds in a gauge shotgun as compared to the similar size gauge shotgun. So, which one would be great when it comes to self defense? In the world of self-defense, you will always find the gauge being highly respected and often chosen over the gauge model. Well, not all people accept that the gauge is the best. Some feel since the gauge is smaller, thinner, has less recoil, and also comes with more rounds should be chosen as the best. Another thing about the gauge shotgun is that it comes with a strong punch as compared to a handgun. It should be good for self-defense. Well, you can always pick either the gauge or gauge models depending on preference since both are good for home defense. What Makes a Shotgun? Shotguns are a type of firearm that uses a plastic shell to fire multiple projectiles a single time. People know shotguns for being able to use buckshot or birdshot not very effective for home defense. This is a huge benefit in situations where you are aiming at moving targets or multiple targets. A typical loading of 12ga 00 buckshot fires nine. Imagine a nine-round burst out of the MP5 sub-machine gun. Then you can start to understand why the shotgun is such a lethal. It is a loved firearm in the hands of law enforcement and military units. Buckshot 12 ga Birdshot You can have shotguns with pump action or semi-automatic functionalities. These two have certain advantages and disadvantages that make for very effective guns at close range.

Chapter 2 : --10 Best Tactical Shotguns for Home Defense of - The Gun Zone

Broad Gauge Finale. Broad Gauge Finale; Compiled from the Photographs & Notes of the Rev. A.H. Malan; by Paul Karau & Eddy Brown; The publication of this unique and valuable collection of photographs, taken during the closing years of the broad gauge, is a fitting tribute to mark the th anniversary (), of the Great Western Railway.

Both the lines were subsequently converted to standard gauge and connected to the emerging Scottish rail network. Some harbours also used railways of this gauge for construction and maintenance. These included Portland Harbour and Holyhead Breakwater, which used a locomotive for working sidings. As it was not connected to the national network, this broad-gauge operation continued until the locomotive wore out in . In the Netherlands started its railway system with two broad-gauge railways. But the neighbouring countries Prussia and Belgium already used standard gauge, so the two companies had to regauge their first lines. In , NRS regauged its line and shortly afterwards connected to the Prussian railways. The HSM followed in . There are replicas of one broad-gauge locomotive De Arend and three carriages in the Dutch Railway Museum in Utrecht. These replicas were built for the th anniversary of the Dutch Railways in . The Scarborough RT , however, uses standard gauge, as will the future light rail lines of the Transit City plan including the under-construction Eglinton Crosstown line. This caused problems in interchanging freight cars with northern United States railroads, most of which were built to standard gauge or a gauge similar to it. In the s, mainly between and , Canadian broad-gauge lines were changed to standard gauge to facilitate interchange and the exchange of rolling stock with American railroads. Today, all Canadian railways are standard-gauge. In the early days of rail transport in the US, railways tended to be built out from coastal cities into the hinterland , and systems did not initially connect. Each builder was free to choose its own gauge, although the availability of British-built locomotives encouraged some railways to be built to standard gauge. The builders and promoters decided that a six-foot track gauge would be needed for locomotives to be larger and more powerful than were in general use at the time, for pulling very large trains. Also the six-foot gauge provided greater stability, and the New York and Erie would operate passenger cars up to 11 feet 3. Many early New York railways were Erie railroad-built branch lines, while others were independent railroads that wanted to partner and interchange with the Erie. However, by the late s, the trend was inevitable, and conversion to standard gauge began, some lines first becoming "dual gauged" with the addition of a third running rail. Between and , most of the remaining six-foot gauge trackage was converted. The new gauge was close enough that standard-gauge equipment could run on it without difficulty. By June , all major railroads in North America were using approximately the same gauge. The final conversion to true standard gauge took place gradually as track was maintained. This may have been to make the tram companies less tempting targets for takeovers by the steam railways or competing trams companies , which would be unable to run their trains over the tram tracks. The system trackage has been extended multiple times since then, and new railcars have been ordered with this non-standard gauge. The use of a non-standard gauge precludes interoperability of rolling stock on railway networks. In the end, the most powerful engines on standard gauge in North America and Scandinavia far exceeded the power of any broad-gauge locomotive.

Broad gauge finale I need to check my notes, but from an answer to my query elsewhere I think this is the hrs Adelaide to Port Pirie express passenger waiting to depart Adelaide Station on 22 October

Freight services are operated by Pacific National. Between Melbourne and Seymour the route consists of two broad gauge tracks with a single standard gauge track alongside. North of Seymour, the broad gauge line branches to Shepparton and two standard gauge tracks continue to Albury. The design engineer was Robert Watson. Construction of a standard gauge track parallel with the broad gauge from Albury to Melbourne commenced in 1884, completing the Sydney-Melbourne railway. Maintaining two parallel railways has drawn criticism, including inefficiencies in maintaining track, operating trains, and duplicated train control centres. Speed restrictions had been applied to the broad gauge line due to track deterioration. The first train on the Wodonga Rail Bypass was in March 1984. They have repeatedly reported freight trains breaking couplings due to the rough track. The Heathcote Junction "Heathcote line closed in 1984. A branch line from Kilmore to Lancefield opened in 1884, closed in 1984. It is now closed. A branch line was built from Cathkin to Koriella in 1884 and Alexandra in 1884. This line closed in 1984. A branch line opened from Benalla to St James in 1884, Yarrawonga in 1884 and Oaklands in 1884, with a break of gauge there until the State Rail Authority line closed south of Boree Creek. The narrow-gauge Whitfield branch line opened from Wangaratta to Whitfield in 1884, closing in 1984. A branch line opened from Bowser north of Wangaratta to Everton in 1884, which was extended to Beechworth in 1884 and Yackandandah in 1884. The line closed in 1984. The Bowser "Everton line was extended to Myrtleford in 1884 and Bright in 1884, now closed. A short line to Peechelba East, which opened in 1884 and closed in 1984, also branched from Bowser. A short branch line opened from Springhurst via Rutherglen to Wahgunyah in 1884. Services were suspended in 1984. A branch line opened from Wodonga to Tallangatta between 1884 and 1884, Shelley in 1884, Beetoomba in 1884 and Cudgewa in 1884. The line closed beyond Bandiana in 1984, [5] and the connection to Wodonga later removed, with only standard gauge traffic continuing to use the line via Albury.

Chapter 4 : North East railway line - Wikipedia

*Broad Gauge Finale * by Rev. A.H Malan (Author) in the Trains category for sale in Port Elizabeth (ID).*

Here is the explanation of that weird legislation. Coal and stone tramways in the United States also had similar gauges. This became the standard gauge. All these broad gauges offered mechanical and traffic advantages, which, however, were seldom exploited. This is hardly a broad gauge, since it gives a negligible advantage over the standard gauge, and offers the inconvenience of not permitting the interchange of vehicles with standard gauge railways. Some say this was just the reason for its adoption, but this cannot be true in most cases. Perhaps the reason was simply a love of round numbers. Louisville, Kentucky liked the situation, since it meant that things had to terminate there and be transshipped, instead of just moving through without leaving any money behind. Eventually, just the trucks on the cars were changed, so things actually did just move through, and the advantage of the break of gauge was lost. Now we come to Ohio. Such a railway was one-third the cost of one with a fully iron track on crossties. Since there was no money in the U. It was satisfactory for the light Jervis locomotives, and the 4- or 8-wheeled cars weighing no more than 10 or 12 tons, moving not to exceed 15 mph, at least in these years. It allowed railroads to be built into virgin territory where a heavier construction was prohibited by its cost. Jervis at first promoted this track, recommending that it be of ample proportions. It was used on the Mohawk and Hudson, as well as on the string of small railways that later became the New York Central. Flat bar track had to be treated with tenderness. What it hated most was to be pried sideways, as from a long wheelbase vehicle negotiating a curve. This applied forces that would loosen the fastenings, or even spring the bars off. To reduce this action as far as possible, locomotive manufacturers recommended that the track gauge be widened to permit a freer motion, especially with the locomotives that were still popular. If you look at any photograph of early rolling stock, you will note that the wheel treads overlap the rail head by a considerable amount. This gauge appears to have been recommended by the Baldwin Locomotive Works, for example. Such a gauge should be called a wide gauge, not a broad gauge. Locomotives, cars and wheels were the same as on standard gauge. I have not seen any evidence that the back-to-back spacing of the wheels on the axles, a critical measurement, was any different. On the other hand, wheels could be made with specially wide treads that would be extra secure. Angus Sinclair repeats the story that the first Rogers engine, the Sandusky, established the wide gauge when it came to the Mad River and Lake Erie around 1825. White points out that this cannot be true, since the charter was granted before the Sandusky was ordered. There was a number of engines named Sandusky; this one is the early Rogers. It would be very interesting to read the associated debate in the Legislature, since it would supply the exact motive. Many other companies followed suit. Lack of standards can certainly cause problems in view of the variations, but not insurmountable ones. He blames the Pittsburgh congestion of on the different gauge to the west. However, congestion at Pittsburgh was not unusual, even when the gauges were the same, as in the First World War. I have not found any comments on a different gauge of the Pittsburgh, Fort Wayne and Chicago, the principal western connection of the PRR, causing any trouble with running through, nor with the P. L., which must have included parts that were still wide gauge. The gauges might not have been different after all; there is no mention of any enforcement. After laying track to wide gauge, it could easily be altered. Congestion at Pittsburgh was only solved in when it became the centre of an operating unit of the PRR, not a boundary point for several units. Modern wheel sets could run as well on wide as on standard gauge, since the treads are 5" wide. There would be some wandering motion on wide gauge, that could be dangerous at high speed, but at low speeds it would be satisfactory. For economy, old wheels may have been made lighter by adopting narrow treads; a tread as narrow as 3" would begin to give trouble. White denigrates the "compromise wheels" that were offered at the time; if these were simply heavier wheels with wider treads, the calumny is unwarranted. A related fable has to do with the dreaded "snakehead. Adams, editor of The Railway Gazette, looked into this around the turn of the century, and could only find two cases. In one, a woman was slightly injured when a piece of iron entered a car in New York around 1850, and in the other, a workman was killed on a construction train of the Jersey Central some years earlier. Not that track did not sometimes

disintegrate under a train and cause a derailment, but there were apparently no "snakeheads" at all resembling the lurid newspaper and magazine cartoons. Even the term "strap rail" is a newspaper attempt to represent the track as made from the thin iron used for packaging, when in fact the rail bars were substantial pieces of iron. Flat-bar track was given up because 1 it could not sustain heavy loads, 2 maintenance costs were very high, and 3 the wood deteriorated rapidly, and not because it was a safety hazard in itself. Jervis himself had given it up by the time he engineered the Hudson River Railroad in 1825. Another common misconception is that before air brakes, only the brakes on the locomotive and tender were available to control the train. Actually, the locomotive generally had no brakes at all; only the tender did, and they were operated by the fireman. It was also difficult to reverse a running engine before the adoption of link motion. Of course, as most of us know, the train was controlled by brakemen working hand brakes on the cars of the train. A brakeman could often control the brakes on the two adjacent cars from his position, and he was in place whenever the train was moving. Many unbraked European freight cars had small cabins for brakemen. Brake vans were made specially heavy and with effective brakes. For normal stops and gradients, the brakemen knew when and how strongly to apply the brakes without being told. The final stop was made with the tender brake. In emergencies, the engineman would call for brakes with his whistle, and he could also signal the brakemen to release brakes. Before descending a heavy grade, the train would stop and the brakemen would partially apply enough brakes to hold the train. It was possible for brakemen to walk on walkways on the roofs of cars so that they could operate more than two sets of brakes, but this was always dangerous if the train was in motion. Air brakes not only permitted emergency stops for the first time, but also allowed trains to be lengthened without adding additional brakemen. On open-platform passenger cars, passengers were not permitted to move between cars; the platforms were for the brakemen. Press, ; edited by J. Calvert Created 15 July

Chapter 5 : The Ohio Broad Gauge

Didn't find what you're looking for? Try adding this search to your want list. Millions of books are added to our site everyday and when we find one that matches your search, we'll send you an e-mail. Best of all, it's free. A special order item has limited availability and the seller may source.

The rail motor vehicles and internal combustion locomotives A chronological and statistical survey Preservation and supplementary information Names; railmotor services; war service; preservation J. See the RAIL series. The edition is probably the best so far. It omits Siphons, Horse boxes, Carriage truck vehicles. Beware of the captions "€" especially in Vol. In spite of the errors this complements the Appendix volumes and goes further back. Firsts, Thirds, Brake Thirds, Composites, i. Note that it largely deals with coaches built this century. The coverage of older coaches is very limited J. Its coverage of older coaches is better than Vol 1, but not perfect. Some Brakedown vans and tenders are included, and there are some interior views. These mostly lasted until the end of the GWR. Also includes the clerestory trailers, Clifton Downs stock, etc. I think it is definitive on the subject but then I wrote it! Lewis Official Drawings No. Includes Lot numbers, Diagram codes and running numbers. Includes drawings which are unfortunately largely undimensioned. Now out of print. If you are interested in 4-wheelers, join the Great Western Study Group , recommended anyway and get hold of their publication "Pannier" No.

Chapter 6 : - Broad Gauge Finale by A.H. Malan

Book Description WILD SWAN, Card Covers. Condition: VG. 1st. Important collection of 19th century photos by the Rev. A H Malan of GWR broad gauge locomotives and trains in SW England. cpp, largely photographic.

Chapter 7 : Wild Swan Publications Railway Books

Compiled from the Photographs and Notes of the Rev. A.H. Malan.

Chapter 8 : Talk:Disused railway stations on the Bristol to Exeter Line - Wikipedia

At the northern end of Didcot Railway Centre in the area controlled by Frome Mineral Junction Signal Cabin the Great Western Society has assembled a unique presentation of artefacts of the broad gauge era.

Chapter 9 : Toofani stars meet Mahesh Babu

Gauge is the distance between rails.. broad gauge has larger distance than metre gauge and metre gauge has larger distance than narrow gauges.. k Views Â· View 2 Upvoters Thank you for your feedback!