

# Wheels & Floats

November 2020



**Tauranga Model Marine and Engineering Club Inc.**

## TAURANGA MODEL MARINE AND ENGINEERING CLUB INC.

The Secretary  
PO Box 15589  
Tauranga 3112

Miniature Railway Memorial Park  
Open to Public, weather permitting  
Sundays : 10am to 3pm approximately

Palmerville Station Phone 578 7293

Website: [www.tmmec.org.nz](http://www.tmmec.org.nz)

Facebook: Memorial Park Railway Tauranga

### MEETINGS

General Members Meeting every first Tuesday  
7pm.

Committee Meeting every second Thursday at  
7pm.

Maintenance Tuesday mornings from 9am.

Engineering discussions Tuesday evenings  
7.30pm.

### COMMITTEE

President: Jason Flannery 5721165

Vice President: Bruce McKerras 5770134

Club Captain Max Donnelly 5716778

Secretary: TBA

Treasurer: Joanne Knights

Committee: Ash Thomas, Russell Prout,  
Warren Belk, Bruce Harvey  
Brian Fitzpatrick, Owen Bennett

Boiler Committee: Peter Jones, Bruce McKerras,  
John Heald.

Safety Committee: Chris Pattison, Peter Jones,  
Warren Karlsson, Jason Flannery.

Editor: Roy Robinson 07 5491182  
[royrobkk@gmail.com](mailto:royrobkk@gmail.com)

### CONVENERS

Workshop: John Nicol, Brian Marriner.

Track: Bruce Harvey, John Stent.

Librarian: Chris Pattison

Rolling Stock: Bruce Harvey

Website: Max Donnelly

MEANZ rep John Heald

### OPERATORS 2020

18 October B Harvey

25 October P Jones

1 November W Karlsson

7 November B McKerras

8 November R Prout

15 November M de Lues

22 November B Fitzpatrick

29 November J Flannery

6 December B Harvey

13 December P Jones

20 December W Karlsson

27 December B McKerras

**Cover photo :** Customers queuing for tickets Halloween Night Run

## Presidents Report November 2020

Another busy month for the club. It has been great to see so many members attending the club's various activities, from working bees to running trains and also putting on a great display for the public.

Before I get started on the months past events I'd like to take the opportunity to welcome four new members to the club, please take the time to make them feel welcome and help them settle in. We have also since decided to hold a playdate on the 5<sup>th</sup> Dec so our new members can come and have a drive if they wish.

So on top of our normal monthly activities this month we had two big weekends.

The 31<sup>st</sup> of October saw what looks to now be an annual event with our Halloween Night Run. Cutting it fine is an understatement, burgers in hand, Murray de Leus on his phone at 5:30pm to the rain gods, the skies cleared up and it was all go. Not another drop of rain for the night and a great turn out from the public, all dressed to scare in their Halloween outfits.

The public seems to really enjoy these night runs so if you haven't already attended one then please come on down next time and see what it is all about.

The next big weekend was the annual open weekend on the 7<sup>th</sup> and 8<sup>th</sup> of November and this was very well supported by our members and visitors. A great display of Model Engineering items for the public to look at complete with several visiting locomotives on both days.

As with the Halloween run during the course of the day several of the ladies assisted in the kitchen making sure all were well fed, thank you for that, and thank you for assisting Roy and Barbra with sorting dinner.

Roy and Barbra once again organised dinner for all on both the Halloween and Open Weekend, this is really appreciated by the club. The number of hours they spend prior to the events organising gear, doing the food purchases, then also cleaning up afterwards is above and beyond our expectations, thank you very much indeed.

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*Engineering*

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The Norm Decke trophy, a very, very difficult choice. Bruce McKerras and I had many conversations about this one. Two outstanding builds this year but ultimately the award is not about a competition, the award is about recognition of an individuals personal achievement and growth in the hobby.

We decided that Regan Olivercrona is this years recipient for his 15cc motor. This is not just about the superbly finished article, but the journey to get there, so well done Regan.

There are currently several models being built in our club so who knows what we will see complete at our next open weekend.

All in all, a great day for the TMMEC and that is because of the people involved! The club is what it is because of the members, without them (you) it is nothing. And of course thanks to all of our visitors for their continued support of our events.

The Tamars new home is clad. Thanks to Metalcraft roofing our container looks like a building. What started as a phone call for a price of coloursteel per lineal metre turned into "You guys do a great job for the community, we will do it for free." Metalcraft supplied and installed the lot for nothing, absolutely fantastic. What else can we say but thank you very much.

Max Donnelly is resurrecting a Sweet Pea from Bruce Harvey, watch this space we are soon to have another steamer on our track!

There is a night run on the 28<sup>th</sup> of November at Manukau, Bruce McKerras and Max Donnelly are going so if you would like to join in then please let them know, I am sure there will be more in tow.

The Committee has agreed to hold the Christmas party next year again, this will be the 13<sup>th</sup> of February. Most likely at Ash Thomas's place again but this will be confirmed closer to the time.

Also we will be having another playdate on the 5<sup>th</sup> of December so if you would like to learn to drive a new engine then please come on down.

Thanks everybody for your ongoing support for our club.

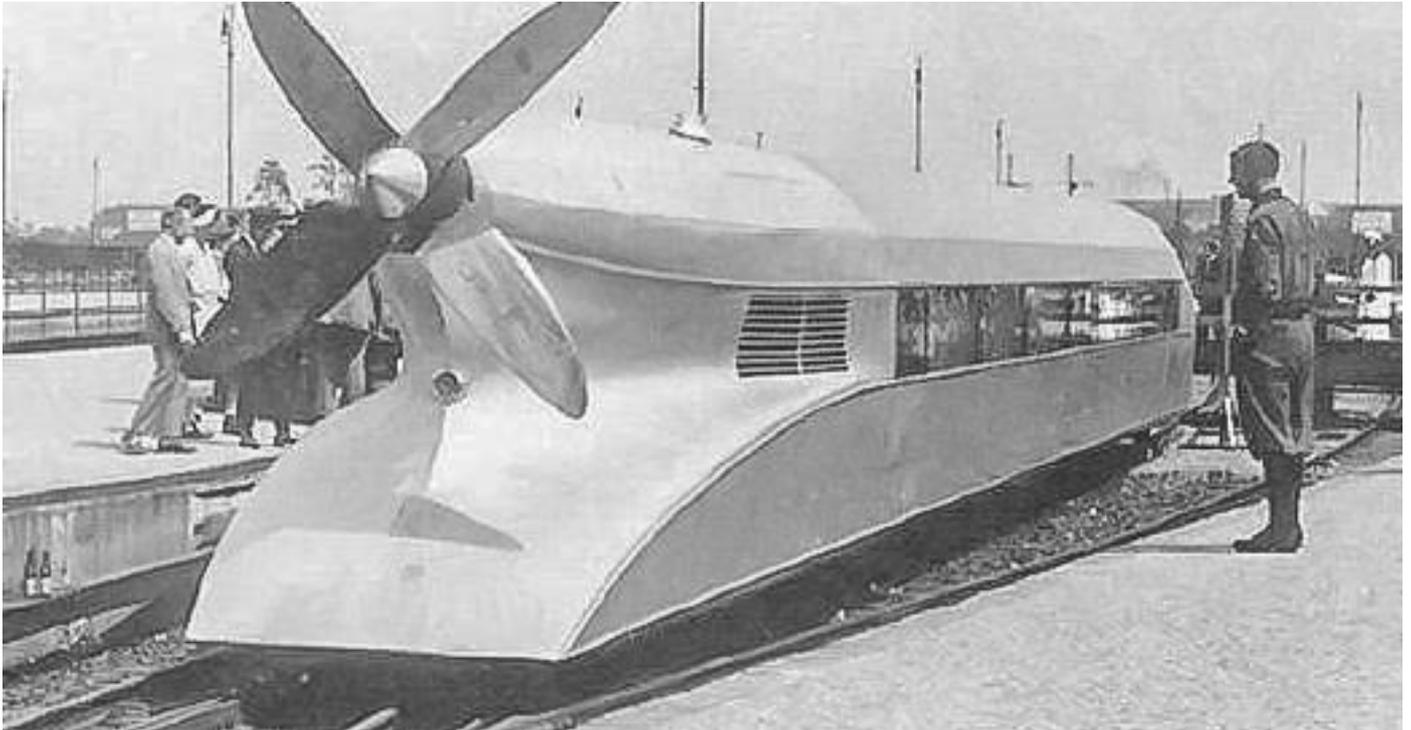
**Jason**



# *Weird Trains that now belong in the History Books*

*By Peter Davies*

## *Schienezepelin*

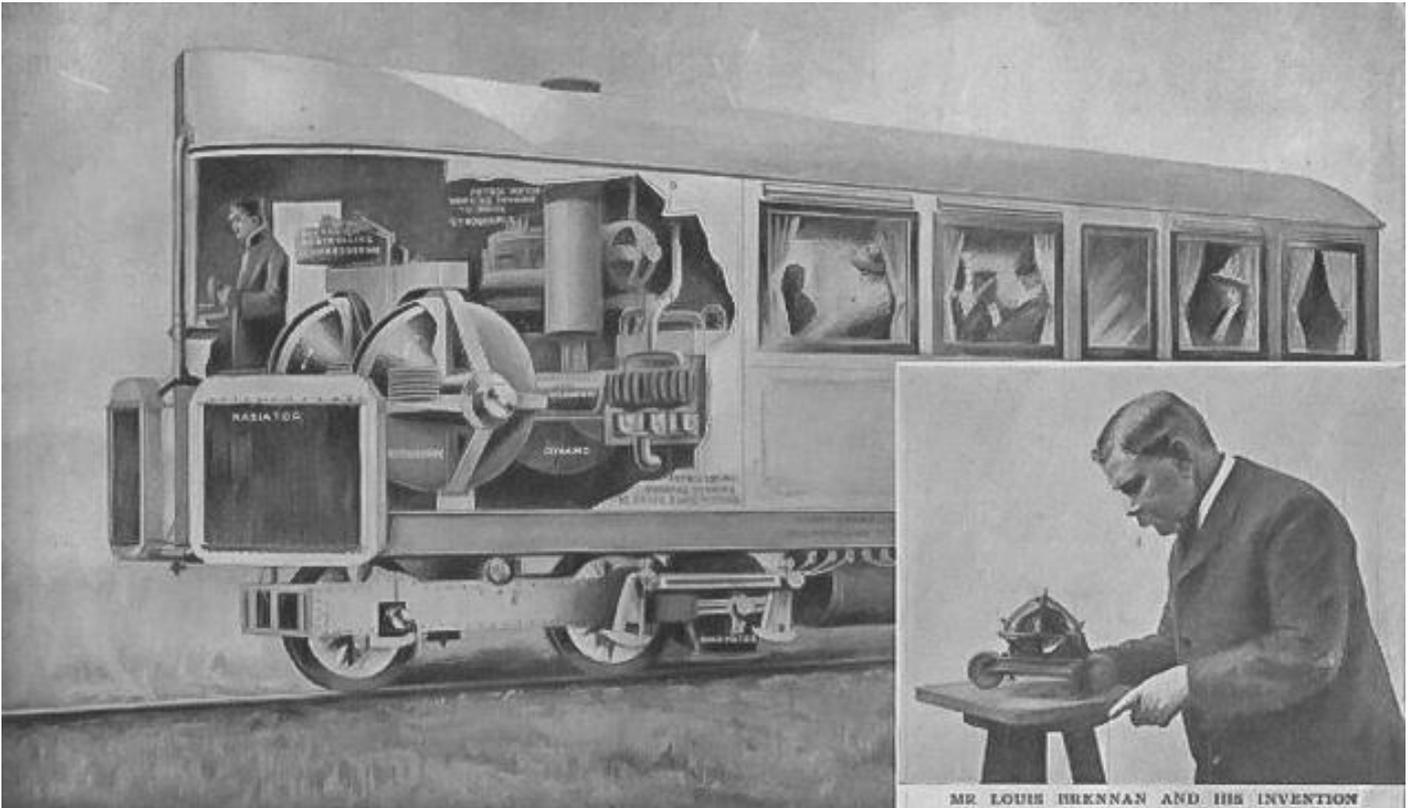


The Schienenzeppelin was a 1931 German attempt to build a super-fast train. The experimental train was powered by an airplane engine connected to a huge propeller in the back. Streamlined and lightweight, this train reached a record speed of 225 kilometers per hour (140 mph) during tests. This record remained unbroken for 23 years.

The Schienenzeppelin never went past the prototype stage because of fears that its propellers could seriously injure or even kill people who stood close to the tracks at train stations. The position of the propellers prevented the train from reversing direction, pulling other coaches, or maintaining the momentum to climb hills.

There were also doubts as to whether the railroad tracks of the day could cope with the stress of this train. The Schienenzeppelin was destroyed during World War II when Germany stripped its aluminum to build airplanes.

## Brennan Monorail



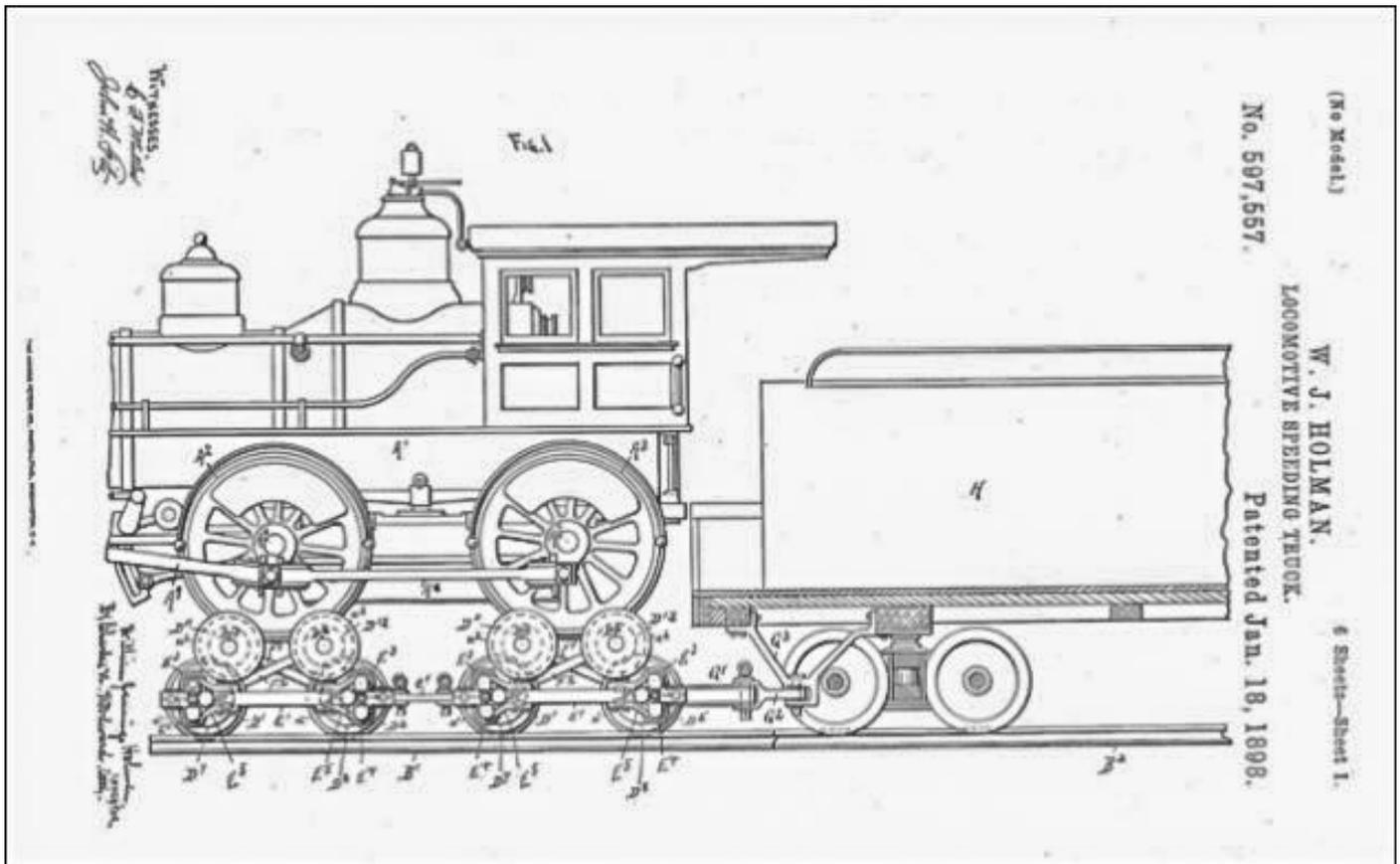
Powered by electricity, the Brennan monorail was invented by Louis Brennan in the early 20th century. We might call it the motorcycle of the train world because it had a single set of wheels and ran on a single track.

It did not tip over even when it stopped. Two gyroscopes stabilized the train to such a degree that the train would probably remain upright and continue moving on the ground if it derailed.

In fact, Brennan invented the monorail to replace regular trains that often derailed whenever they tried to take curves at high speed. But that's true only if the gyroscopes worked correctly.

Unfortunately for Brennan, his monorail never replaced regular trains because the failure of even one gyroscope would cause the train to derail and crash violently. In addition, the train was not cost-effective because it could not pull other coaches.

# Holman Train



Although it was built in 1887 and 1897, the Holman train was not created to improve rail travel. Instead, it was built to defraud people of their hard-earned money. In fact, the only difference between the Holman train and other steam trains of the day was that the Holman train had several wheels placed on top of each other.

The wheels served no practical purpose, but its inventors claimed that they made the train run faster. The fraudulent scheme was so sophisticated that the train had its own patent and ran experimental trips. The Holman Locomotive Speeding Truck Company, also a fraud, was formed to oversee the train's development.

The company attempted to raise \$10 million by selling fake shares of stock at \$25 per share. Many people fell for the swindle and lost their hard-earned money when the inventors disappeared.

## *Jean Bertin's Aerotrain*



In the 1960s, Jean Bertin's Aerotrain was the hovercraft of the train world. Funded by the French government to replace conventional trains, the Aerotrain moved by creating a cushion of air over a concrete monorail.

The train was comfortable, light, quiet, and fast. Its prototype reached speeds of 420 kilometers per hour (260 mph). Its tracks were cheap and easy to construct. Best of all, they did not need as much precision and maintenance as regular tracks.

About 20 countries expressed interest in the promising train. Bertin boasted that it would be available for worldwide use by the year 2000. However, after Bertin turned his completed train over to the French government, they canceled future development in 1974 because of fears that the train would kill the state-sponsored railway system. Devastated by the government's decision, Bertin died one year later.

## *General Motor Aerotrain*

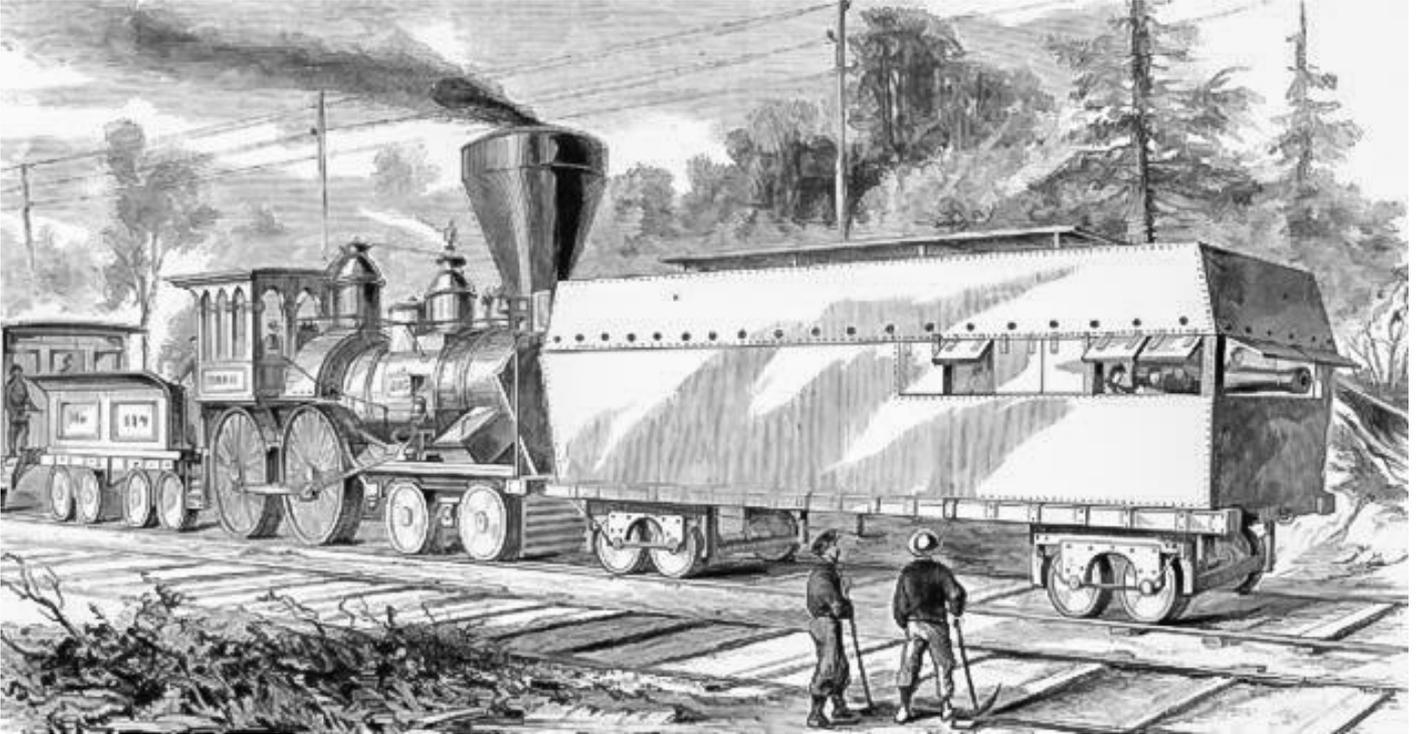


The General Motors Aerotrain was made by the auto company in the 1950s. It was sponsored by several railway operators who wanted a faster train to win back former customers who had switched to other means of transportation.

The Aerotrain was nothing new. General Motors simply joined several of their buses and put them on a train chassis. Nevertheless, the Aerotrain was light and fast, with less than half the weight of regular steam trains when fully loaded.

General Motors made two prototypes which they gave to several railway operators to test. All the operators complained about the train's engines, which were so underpowered that they couldn't reach their maximum speed or climb uphill. In addition, the train was so light that passengers compared the experience to the rough ride of a truck.

# Armored Trains

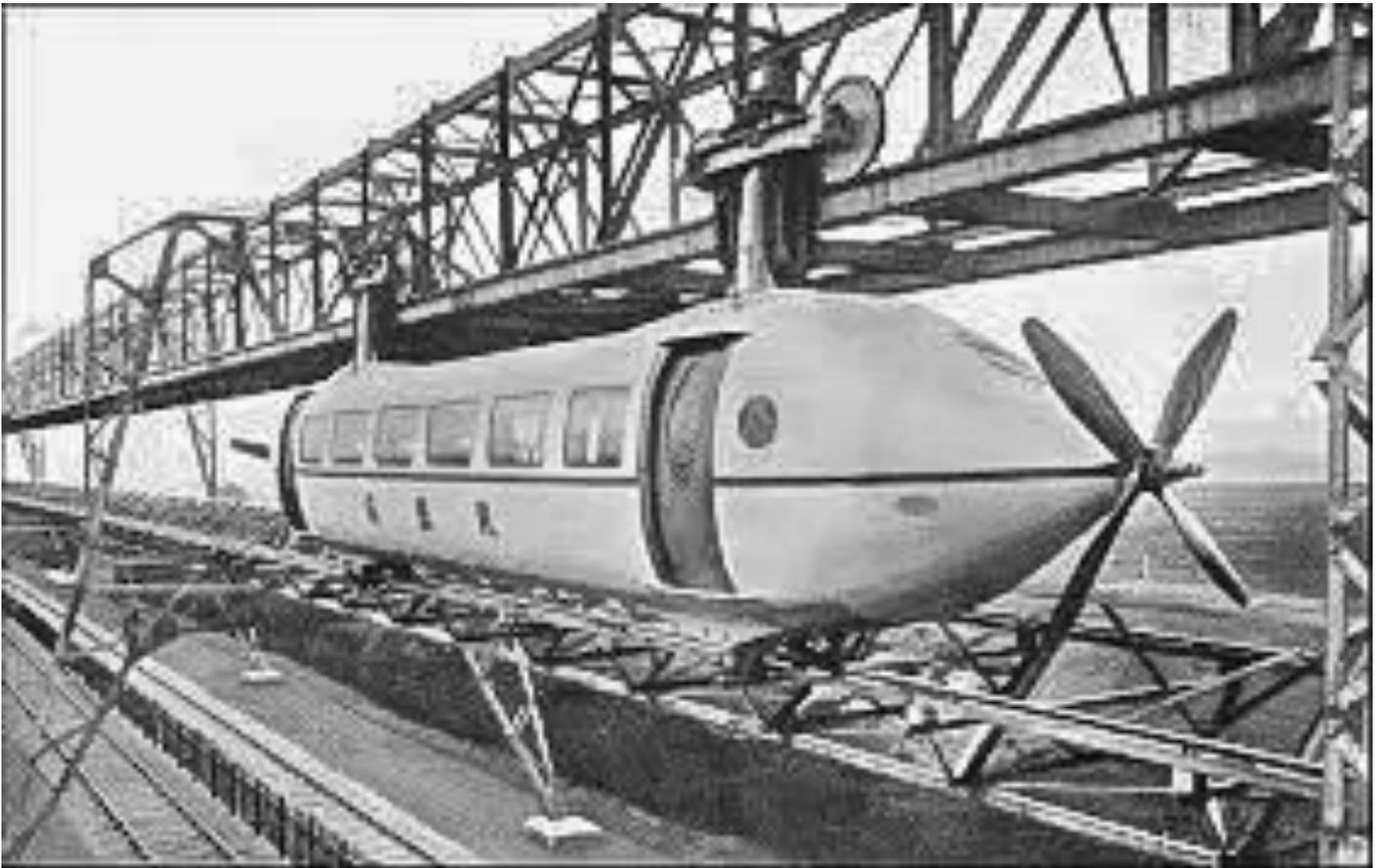


Armored trains were first used for military purposes during the US Civil War when Union General Joseph Hooker transported over 20,000 soldiers on them. Initially, the trains were covered with defensive armor to protect the soldiers from ambush. However, the vehicles soon began sporting heavier armor and weapons, such as cannons, anti-aircraft guns, and machine guns.

Enemy infantry and tanks were usually no match for armored trains. But the trains were soft targets for enemy airplanes that could easily spot and destroy them from the skies. Their tracks were also vulnerable to sabotage by just one person.

After World War II, armored trains were replaced by more advanced war vehicles. Even so, there are reports that the Russian military is planning to return armored trains to battle against homegrown militants who often attack the Russian railway system.

## *Bennie Railplane*



The Bennie Railplane was invented by George Bennie in 1930. To replace coal-powered steam engines, the train ran on special tracks that Bennie planned to build above regular railroad tracks. The train looked similar to more modern cable cars except for its two propellers that were powered by an engine. Wheels on top of the train allowed it to move along its overhead tracks.

Bennie claimed that the railplane could reach speeds of up to 190 kilometers per hour (120 mph). However, its experimental track was too short to attain such a high speed.

Bennie couldn't find investors for his train because people were recovering from the Great Depression and World War II was just around the corner. In 1957, Bennie sold his experimental rail track at a fire-sale price. Bankrupt, he died one year later.

## *M-497 Black Beetle*



The Black Beetle was a regular passenger train that was modified to run on jet engines from a B-36 bomber. It underwent a series of tests, ultimately reaching a record speed of 295 kilometers per hours (185 mph). This world record remained unbroken for 40 years.

However, the New York Central Railroad stopped development of the vehicle because jet-powered trains were too expensive to build and maintain. The carriage was returned to service, and the jet engines were used to make the world's first snowplow for railroad tracks.

## *Horse Drawn Trains*



Horse-drawn carts were the first trains, predating the steam-powered variety by about 200 years. Horse-drawn trains were first used on wooden tracks to transport coal away from coal mines. Similar tracks were soon built to link neighboring towns, and the vehicles began transporting people as well as goods. The trains moved as slow as 10 kilometers per hour (6 mph), yet they were more reliable and comfortable than horse-drawn carriages on bumpy roads.

The first tracks were one-way, with the laws of the day giving the right of way to trains carrying goods. People on passenger trains were required to carry their train away from the tracks whenever they encountered a goods train coming from the opposite direction.

The invention of steam-powered trains eventually made horse-drawn trains obsolete, although both initially competed for the tracks. Some railway operators even switched back to horse-drawn trains temporarily because the first steam engines were unreliable and prone to explosion. Horse-drawn trains remained in use until at least the end of the 19th century.

## From the Cave at Katikati

Still only a few articles.....**Please.....Please**

### WANTED

I'm looking for Issues 4635—4641 (inclusive) UK Model Engineer. If anyone can help I would appreciate it. Beg, borrow, steal but preferably not pay!!! Thanks, Editor



Pics from the Halloween Night Run



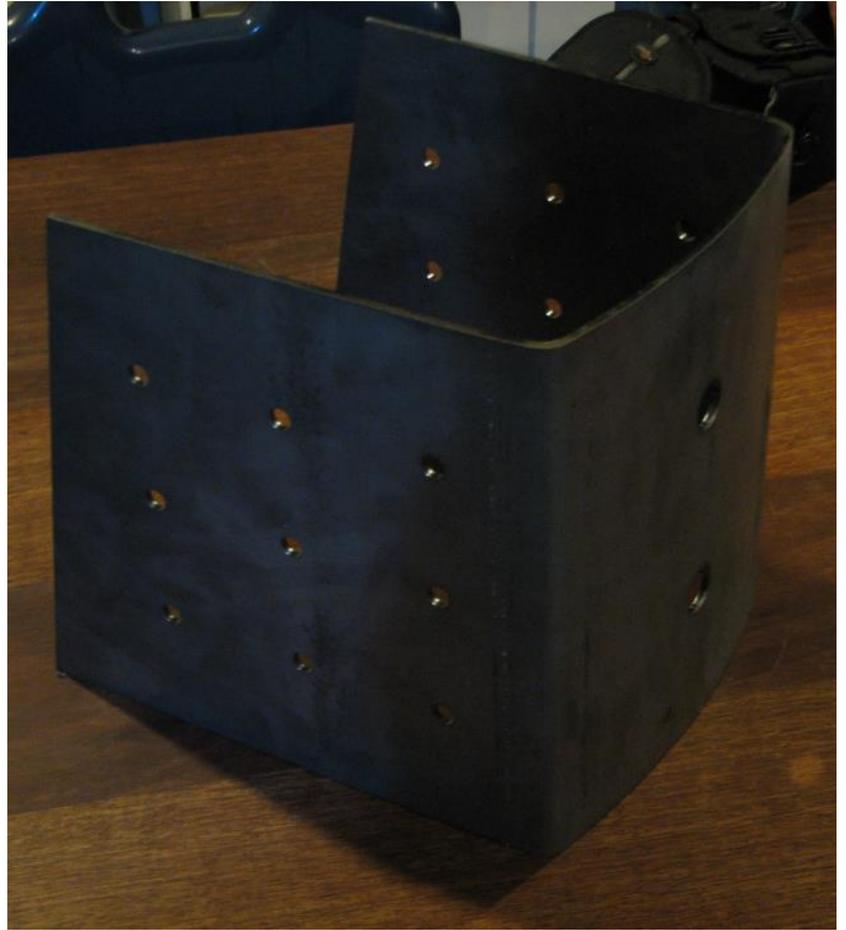
### Disclaimer :

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## Show and Tell



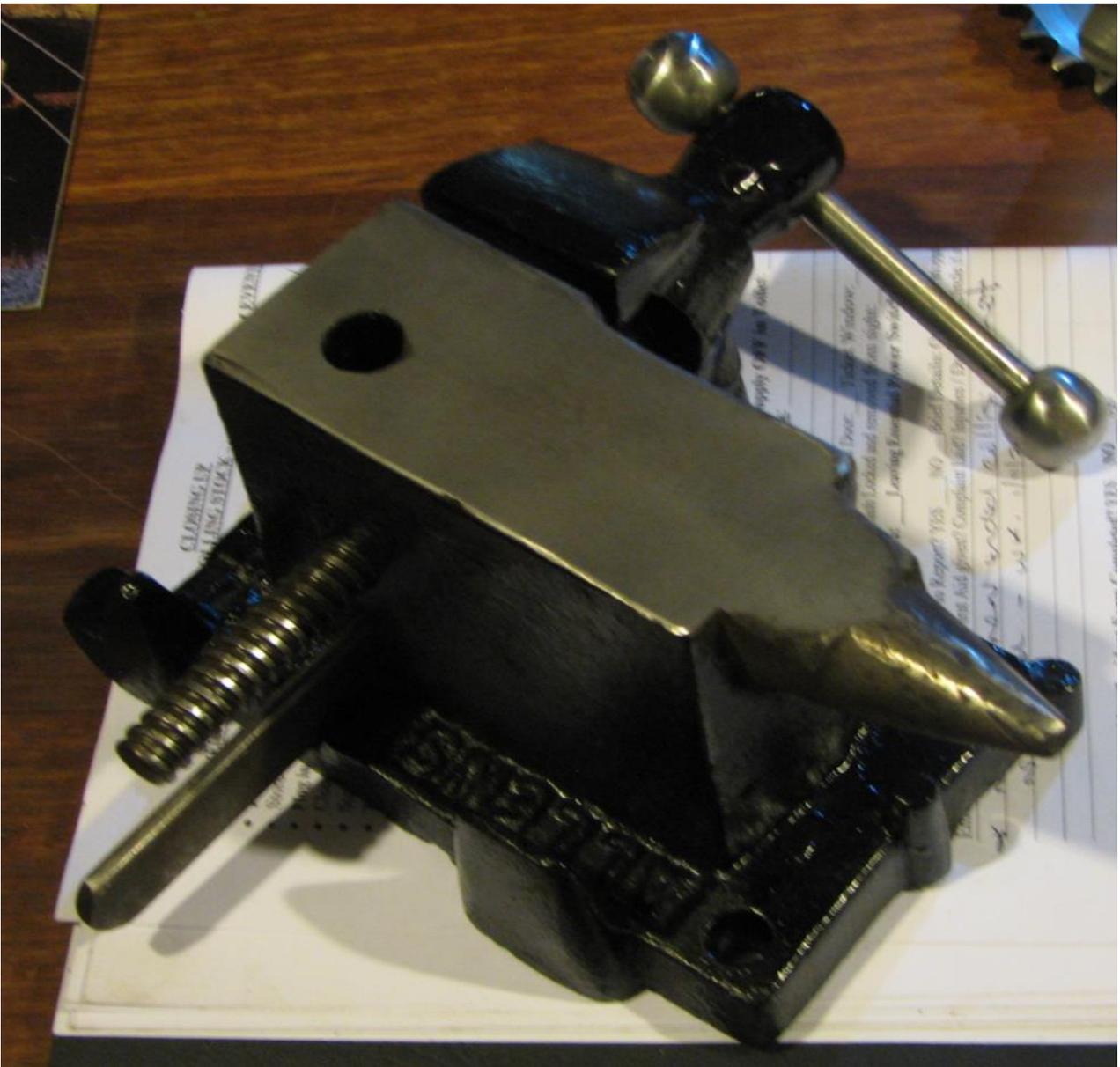
Top left : Bruce McKerras purchased a sprocket blank then machined it to fit on his Velocette motorcycle to give it longer legs.



Top right : The prototype fire box for John Stent's Garratt. This was the trial run before cutting and folding the actual material for that part.



Bottom : The funnel for Owen Bennett's project. This project contained several challenges of compound curves which tested Owen's skills and patience.



Every now and again someone turns up with a “thingy” seeking answers to “what the hell is it”!!! This was true at the last meeting when Peter Lawn dropped this “thingy” on the bench. It has the hallmarks of a vice with an anvil included. There were many and varied suggestions but no one came up with a concrete offer of what it was.

When next checking my emails I had received one from Super Sleuth Murray de Lues who had spent all night scouring the WWW and had come up with the original patent of Peter’s “thingy”. In view of the extreme effort Murray had put into the search I decided to include the patent for you all to mull over so you all knew what the “thingy” was.



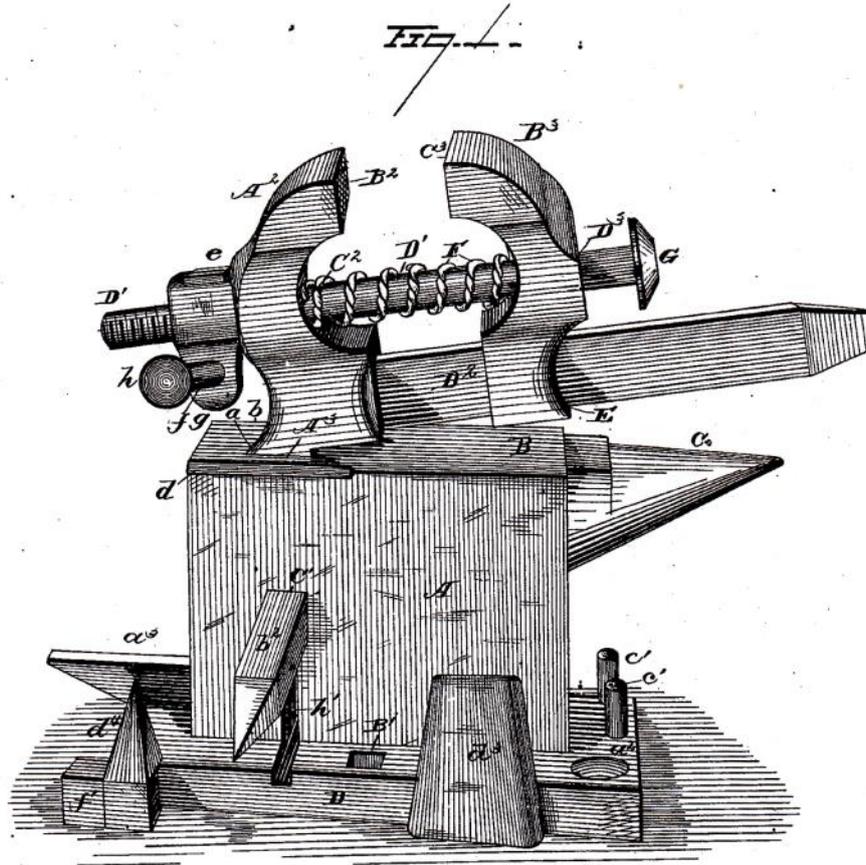
# **MORGANSTEEL**

Steel Fabrication & Engineering Specialists [www.morgansteel.co.nz](http://www.morgansteel.co.nz)

(No Model.)

4 Sheets—Sheet 1.

J. ALLEN.  
Combined Anvil and Vise.  
No. 240,217. Patented April 19, 1881.



WITNESSES  
*Ed. Nottingham*  
*Am. Wright*

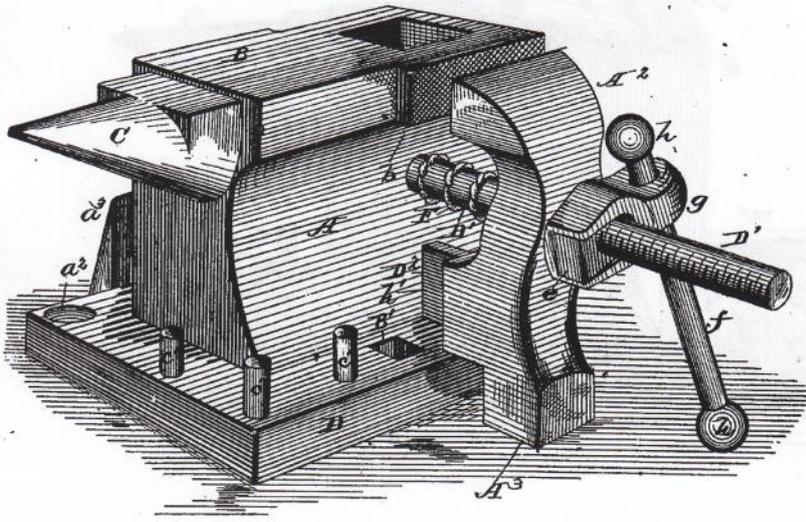
INVENTOR  
*Joseph Allen*  
*By H. A. Symons*  
ATTORNEY

(No Model.)

4 Sheets—Sheet 2.

J. ALLEN.  
Combined Anvil and Vise.  
No. 240,217. • Patented April 19, 1881.

Fig. 2.



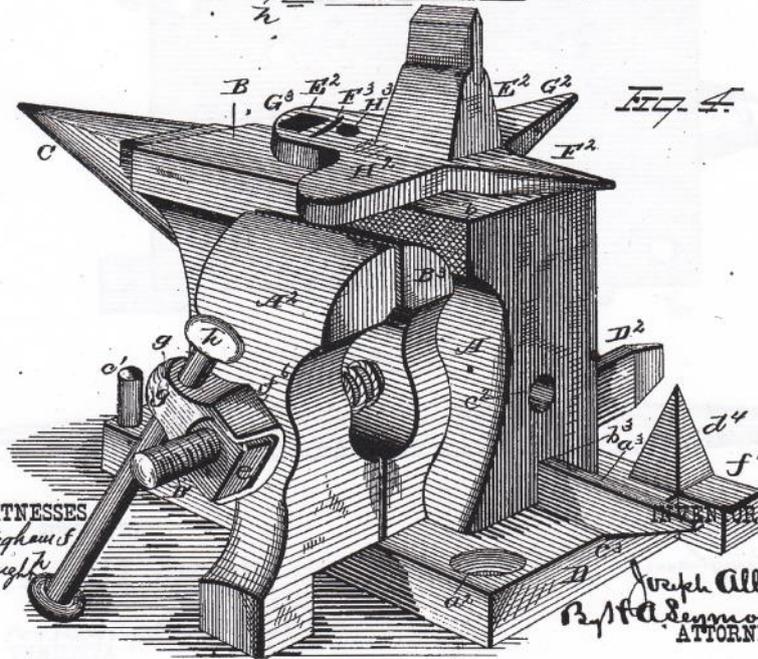
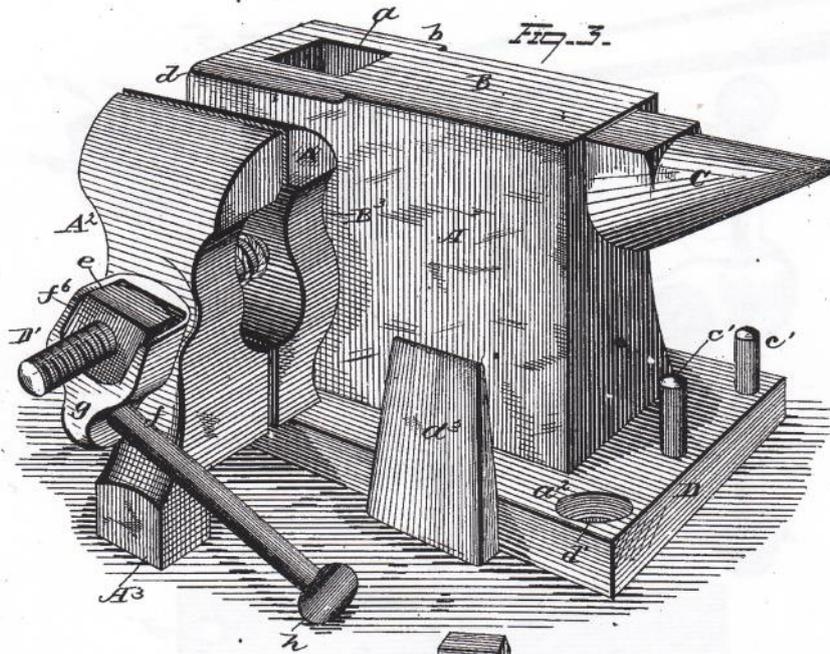
WITNESSES  
*E. Nottingham*  
*A. Wright.*

INVENTOR  
*Joseph Allen,*  
*By H. A. Seymour,*  
ATTORNEY

(No Model.)

4 Sheets—Sheet 3.

J. ALLEN.  
Combined Anvil and Vise.  
No. 240,217. Patented April 19, 1881.



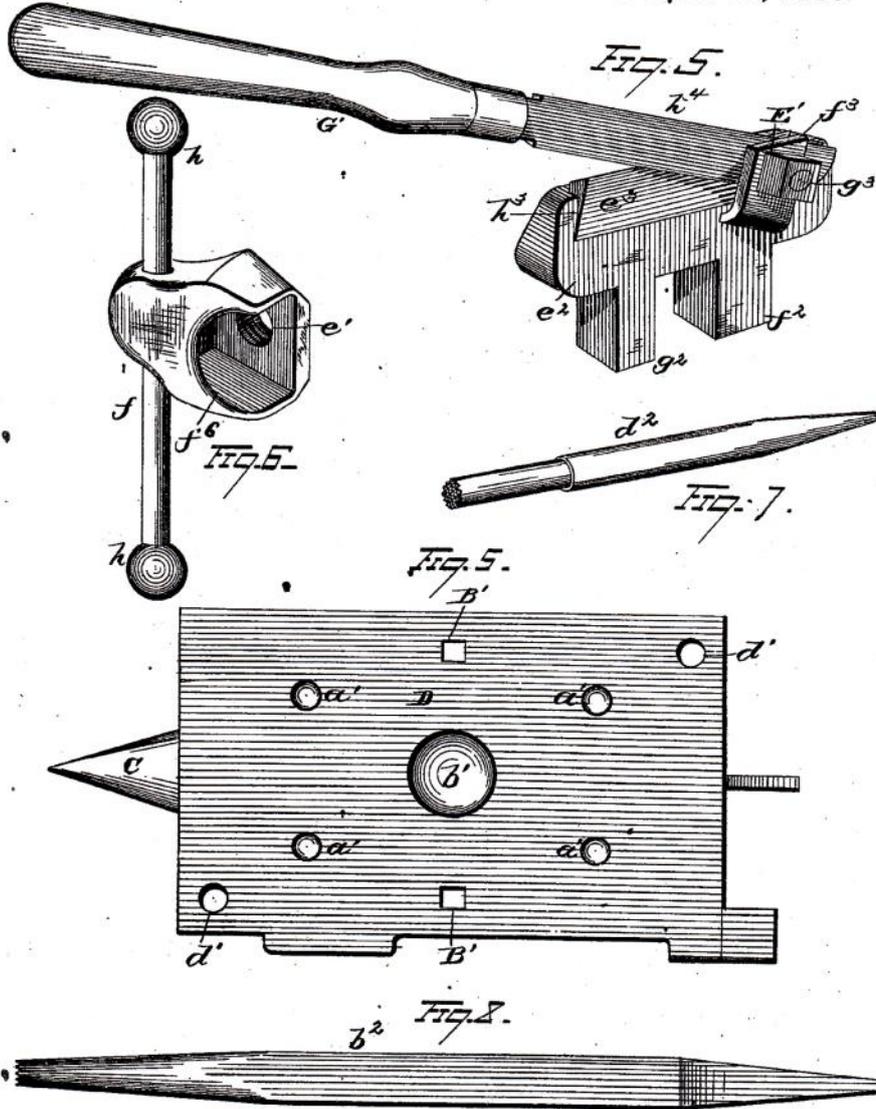
WITNESSES  
G. Nottingham  
Attorneys

Joseph Allen,  
By H. A. Denmore,  
ATTORNEY

(No Model.)

4 Sheets—Sheet 4.

J. ALLEN.  
Combined Anvil and Vise.  
No. 240,217. Patented April 19, 1881.



WITNESSES  
*E. Nottingham*

INVENTOR  
*Joseph Allen*  
*R. H. Seymour*  
ATTORNEY

# UNITED STATES PATENT OFFICE.

JOSEPH ALLEN, OF PALMYRA, NEW YORK.

## COMBINED ANVIL AND VISE.

SPECIFICATION forming part of Letters Patent No. 240,217, dated April 19, 1881.

Application filed September 1, 1880. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH ALLEN, of Palmyra, in the county of Wayne and State of New York, have invented certain new and useful Improvements in Combined Vise and Anvil; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in metal-working tools, and is designed to provide a combined vise and anvil combining simplicity of construction and a wide field of adjustment with ease of operation and comparative cheapness of production.

With these ends in view my invention consists in certain details of construction and combination of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a rear view, in perspective, of my combined tool, and represents the vise attachment mounted on the working-face of the anvil. Fig. 2 is a view of the anvil with the vise adjusted to the rear face thereof. Fig. 3 represents the vise attached to the rear face of the anvil in different adjustment from the adjustment of vice shown in Fig. 2. Fig. 4 is a view of the anvil, showing the hardy in position and the adjustable vise attached to the front face of the anvil-block. Fig. 5 is a view of the reverse face of the anvil-block. Fig. 6 is a perspective view of the vise-lever. Fig. 7 is a detached view of the combined adjustable anvil-horn and prick-punch; and Fig. 8 is a similar view of the reversible reamer, prick-punch, and ferule-welding device.

Let A represent the body or web of the anvil, B the working-face thereof, C the beak or horn, and D the anvil-seat.

The anvil is formed of cast-metal, having its working-face, horns, and all other points which it is desired shall present a hard and refractory surface to continuous heavy blows and constant use, chilled simultaneously with the operation of casting, said chilling being effected by disposing suitably-formed chills at desirable points throughout the mold, a thin

face of steel being formed on the chilled portions by dusting the chills with steel filings and powdered borax, which latter will operate to cause the filings to fuse and become incorporated with the body of the casting. The hardy-hole *a*, located as is customary near the beel of the anvil, and having chilled and steel-faced interior walls, performs the twofold office of offering adjustment for the hardy and the vise when mounted on the face of the anvil, as shown in Fig. 1 of the drawings. A portion of the front face of the anvil directly in front of the hardy-hole *a*, and designated by *b*, is chilled and serrated, and adapted to engage with the outer and adjustable jaw *A*<sup>2</sup> of the vise when the latter is attached to the front face of the anvil in the adjustment shown in Fig. 2 of the drawings. The upper edge, *d*, of the anvil, directly in the rear of the hardy-hole *a*, is chilled, steel-faced, and rounded, and offers a convenient place for working heated or cold metal into rounding shapes. The beak or horn *C*, forming the forward extremity of the anvil, is of substantially the same form as the horn of an ordinary anvil.

Fig. 5 is a view of the reverse face of the anvil-seat *D*, and shows the countersinks *a'*, for forming rivet-heads, and the nut-cracking depression *b'* in the center of said reverse face. A flange extends around the bottom of the anvil and forms the seat *D*, which offers a broader bearing for the anvil, enables it to be more readily secured to any block or bench, distributes the shock of heavy blows through a larger mass, and contains a number of projections and configurations of form useful in iron-working. On the front face of said seat are formed two pins, *c' c'*, another pin *c'* being situated directly under the beak or horn *C*. The uses of these pins are various, but chiefly relate to bending wire at different angles, and also, when not in use for such purposes, they will be found to be a convenient rest for tools. Circular apertures *d' d'*, formed in the anvil-seat, respectively on the rear left and front right hand corners thereof, and having countersinks *a<sup>2</sup> a<sup>2</sup>*, have threefold uses—in bolting the anvil and seat to an anvil block or bench, in wooden-pin making, and in receiving in removable adjustment the reversible reamer and welding-tool *b<sup>2</sup>*.

In the heel of the anvil a counterbore is formed at  $c^2$ , to receive the adjustable horn  $d^2$ , (shown in detached view in Fig. 7 of the drawings.) When this horn is in position in the socket or counterbore  $c^2$  it has a variety of uses in light work, as bending and welding, and is adapted to be used as a prick-punch when withdrawn, the end inserted in the anvil being serrated or roughened, to guard against upsetting when used in such punching capacity. Beneath this adjustable horn a stationary knife or rectangular horn,  $a^3$ , is located, one end whereof is received in an oblong slot,  $b^3$ , in the heel of the anvil, said adjustment being further stiffened by a recess,  $e^3$ , in the seat of the anvil, into which the lower edge of the knife fits, and is thereby prevented from lateral displacement. On the rear portion of the seat D two blocks are placed and cast integral therewith or made detachable therefrom.

$d^3$  is a wedge-shaped block having a sharp edge, and is designed to be used in cutting bars of iron and in opening links; and  $d^4$  is a pyramidal-shaped block adapted to be used in bending angles, opening links, &c.

To the left of the block  $d^4$  is a rectangular block,  $f^4$ , cast solid with the anvil-seat D and projecting therefrom. This block is designed to be used in bending angles, and also serves, in many instances, to support articles being manipulated on the block  $d^4$ .

Rectangular holes  $B^4$   $B^4$  are formed on each side of the anvil and about midway of the length of the anvil-seat. Said holes may be made use of in securing the anvil to a block or bench, and also offer other adjustments for the reversible reamer and welder  $b^2$  and adjustable horn  $d^2$ .

The cast-steel bar  $b^2$  is formed with one end square for reaming purposes and one end round for welding small ferrules. This rod, like the adjustable horn  $d^2$ , is adapted to be used as a punch, one end being roughened or serrated to prevent it from upsetting when so used. This rod may be used in a variety of adjustments and for different uses in any of the holes  $B^4$   $B^4$   $d^4$  in the anvil-seat D, or it may be inserted in the body of the anvil, and from either side thereof, through the rectangular opening  $C^4$ , formed for the reception of the screw  $D^4$  of the vise.

The vise used in combination with my anvil consists in an outer jaw or arm,  $A^2$ , of cast-steel or chilled metal, which has a serrated clamping-jaw,  $B^2$ , a circular aperture,  $C^2$ , through which the screw  $D^2$  passes, a flat spline,  $D^2$ , rigidly secured thereto or made integral therewith, (which latter has a screw-driver formed at its outer end,) and a foot,  $A^3$ , which is received in the hardy-hole  $a$  when the vise is mounted on the anvil-face, as shown in Fig. 1. Said foot also serves as a supplemental support when the vise is in the adjustment shown in Figs. 2 and 3 of the drawings. The sliding jaw  $B^3$  of the vise has a serrated clamping-face,  $C^3$ , a rectangular slot,  $D^3$ , which re-

ceives the square end of the vise-screw  $D^4$  and prevents it from turning therein, and the vertical slot E, which allows the said sliding vise-jaw  $B^3$  to be supported and have sliding movement subject to the spring F and screw  $D^4$  on the spline  $D^2$ . The screw  $D^4$  is provided with a head, G, at one end, and is first passed through the sliding jaw  $B^3$  from the outside thereof, in order that the square part of said screw may be received in the rectangular slot  $D^3$ .

A spiral spring, F, coiled from a double-stranded wire rope encircling the screw  $D^4$  and interposed between the two vise-jaws  $A^2$  and  $B^3$ , operates to force them as far apart as the position of the nut  $e$  will permit. An ordinary nut,  $e$ , on the vise-screw  $D^4$  serves, by its rotation, to change the relative adjustment of the spring-pressed vise-jaws by moving the sliding jaw  $B^3$  on the spline  $D^2$ . The nut  $e$  is turned on the screw by means of a lever nut-wrench, consisting of a bar,  $f$ , passed through a block,  $g$ , and having knobs  $h$   $h$  at each end thereof to retain it in the block, which latter is perforated at  $e'$  to receive the screw  $D^4$ , and recessed at  $f^6$  to receive the nut  $e$ . The bar  $f$  has free movement in the block, thereby allowing the leverage to be changed at pleasure.

The vise may be used in five different adjustments with the anvil, three of which are shown in the drawings. The adjustment shown in Fig. 1 has the vise mounted on the face of the anvil. In this position the work will be brought nearer the operator, and the force of the blows of a hammer will be absorbed by the anvil, as they will fall in a line drawn through the center thereof. However, when it is desired to use the horn C of the anvil simultaneously with the vise, the position thereof may be reversed. Again, the spline may be inserted into the oblong hole  $h'$ , provided for its reception in the body of the anvil from the rear of the anvil, and the vise used in this position, in which the foot  $A^3$  will support the outer jaw,  $A^2$ ; or the spline may be inserted in the hole  $h'$  from the front side of the anvil, as shown in Fig. 3.

Fig. 2 shows still another method of vise adjustment. Here the arm  $B^3$  of the vise is removed, the screw  $D^4$  withdrawn and passed through the rectangular hole  $C^4$  in the anvil provided for its reception, from the rear side thereof. The spring F is then passed over that end of the screw which projects from the front face of the anvil. The screw is passed through the aperture  $C^2$  in the outer jaw,  $A^2$ , of the vise, the spline  $D^2$  being received into the slot  $h'$  from the front face of the anvil, and the nut being placed on the screw  $D^4$ , the arm  $A^2$  of the vise may be turned up to engage with the serrated face  $b$  of the anvil, which is now substituted for the sliding jaw of the vise.

The hardy (shown in Fig. 4 of the drawings) consists of a shank adapted to be received into the hardy-hole, of four lateral arms, and a vertical arm. The vertical arm  $E^2$  is provided with a cutter made in one piece with the hardy or rigidly secured thereto.  $F^2$  is a beak or horn-

shaped arm. G<sup>2</sup> designates a horn-shaped arm with a flattened upper surface. H<sup>2</sup> represents a flat arm with a rounded end, and E<sup>2</sup> an arm with a broad working-surface, and provided with a groove, F<sup>3</sup>, for straightening steel and wire, a rectangular hole, G<sup>3</sup>, and a circular hole, H<sup>3</sup>.

From the foregoing description it will be seen that my invention is adapted, by means of its many adjustments and combinations of parts, to a wide field of usefulness, embracing in one article a greater variety of iron-working tools than any device of this character yet produced.

I would have it understood that I do not claim as forming a part of this invention any of the following enumerated devices herein shown and described, to wit: the anvil flange or seat, the pins, wedge-shaped block, pyramidal and rectangular blocks, welding and reaming and prick-punch tool, and the rectangular and circular apertures in the flange provided for its adjustment, the knife-horn, prick-punch adapted to be received in a countersink in the heel of the anvil, and countersinks and nut-cracker in the reverse face of the anvil, and the hardy.

I do not limit myself to the exact construction shown and described, but hold myself at liberty to

make such slight changes and alterations as will come within the spirit and scope of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with an anvil having an outwardly-projecting base formed solid therewith, of a vise located at the side of the anvil and provided with a screw and spline, which extend transversely through the anvil, said vise being supported on the outwardly-projecting flange of the anvil, substantially as set forth.

2. The combination, with the vise-screw, of a nut and a nut-receiver adapted to be engaged with the nut, substantially as set forth.

3. The combination, with the vise-screw, of a nut and a nut-receiver constructed with a projection located at one side of the recess for the nut, and a lever inserted through said projection, substantially as set forth.

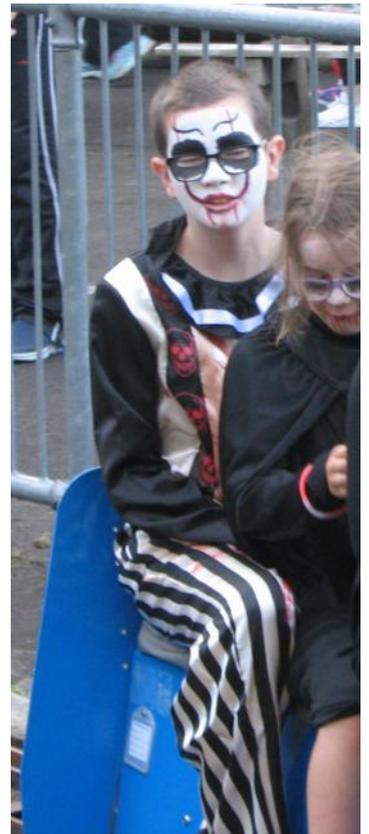
In testimony that I claim the foregoing I have hereunto set my hand and seal, this 26th day of August, 1880.

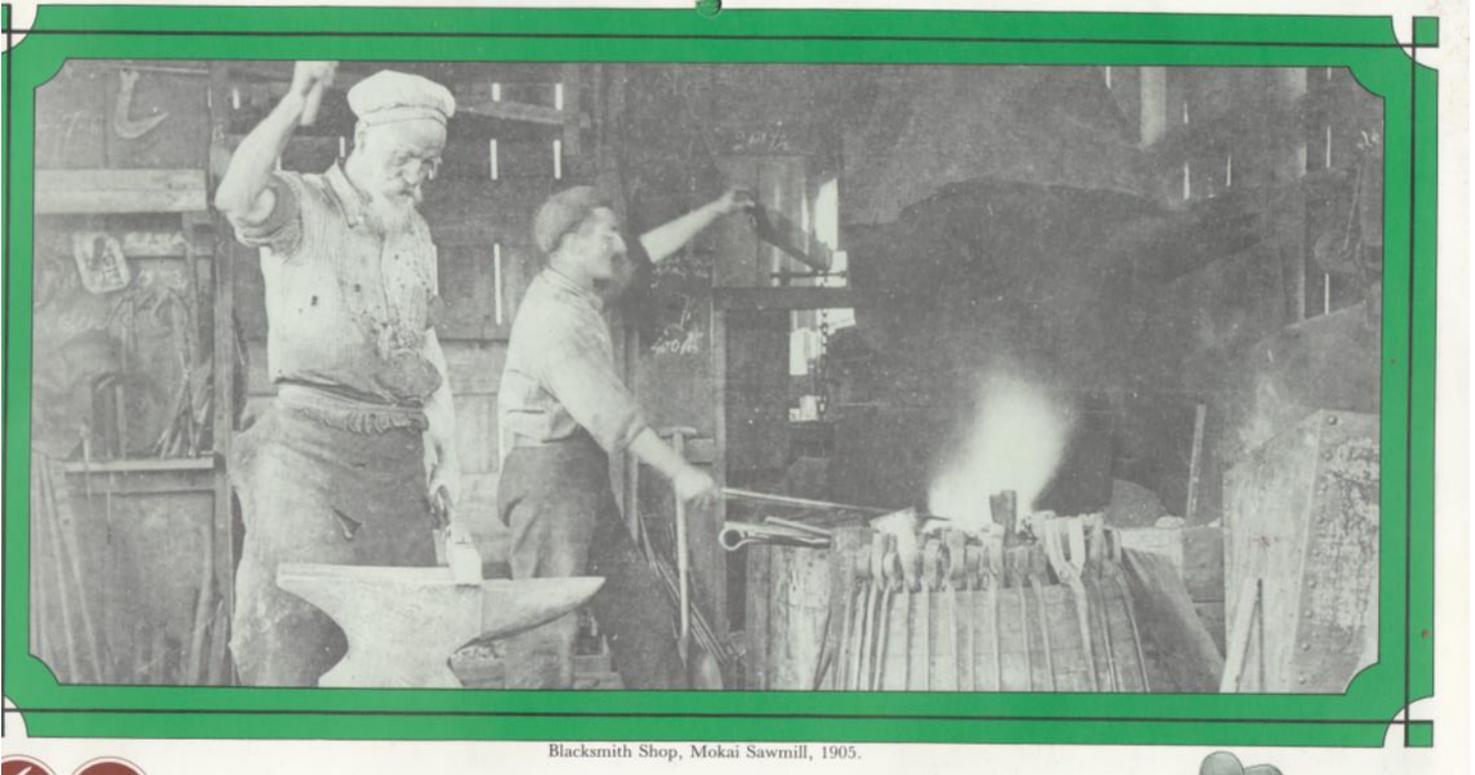
JOSEPH ALLEN. [L. S.]

Witnesses:  
 PLINY T. SEXTON,  
 ROBT. M. SMITH.



More from the Halloween Night Run





Blacksmith Shop, Mokai Sawmill, 1905.

Another picture from the Kanapine Timber and Hardware Calendar 1985

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# Important Information

14th August 2020

## TMMEC Covid Level 2 modus operandi.

### Under Covid Level 2 NO public rides will be offered.

The club will still hold maintenance Tuesdays and Tuesday evening engineering nights, as numbers are usually low enough to maintain 1 metre “Social Distancing”, however the monthly “General Club Meeting” attracts about 25 members and the Committee feel that these shall cease immediately until **Covid Level 1** is again back in force.

Club Play-days will continue under **Covid Level 2**, with prior registration by any visitors, so as to manage the total number to a manageable number.

ALL Club members and ALL Visitors must sign into the Attendance Register, including any accompanying persons such as family, and on Play-day report to the Duty Operator so he/she is informed of your attendance.

If the Government raises the **Covid Level to 3** all club activities will cease immediately – except for one person to carry out security checks as and if required.

To reiterate, unless we are at **Covid Level 1** or lower, Club activities are restricted or curtailed until further notice.

## Committee TMMEC



More from the Halloween Night Run



