

ILLUSTRATED CATALOGUE No. 105.

January, 1905.

"DECAUVILLE"

(Registered Trade Mark.)

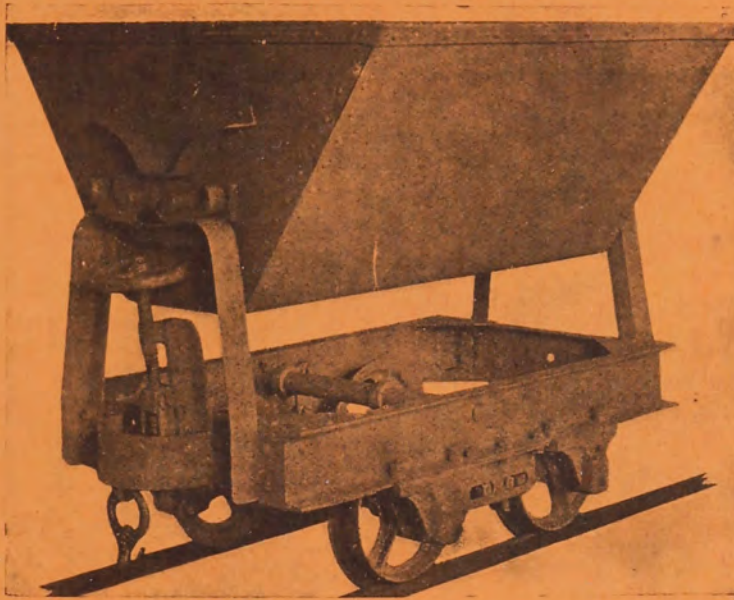
PORTABLE RAILWAY.

As Supplied
to the
BRITISH,
INDIAN,
COLONIAL,
and
FOREIGN
GOVERNMENTS.

*First Outlay very
soon returned.*

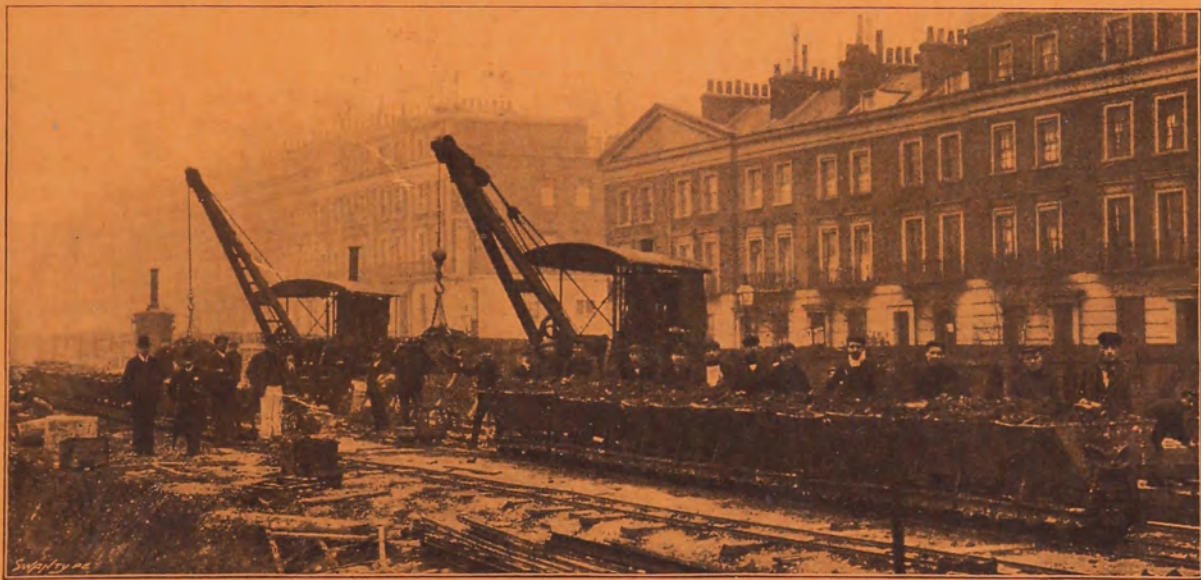
*Planned Material and
Installations a
Speciality.*

*Enormous Saving in
Cost of Transport.*



Largely used by
RAILWAY
CONTRACTORS,
DOCK & HARBOUR
CONTRACTORS,
GAS WORKS,
CEMENT WORKS,
BRICK WORKS,
BUILDING WORKS,
TIMBER YARDS,
QUARRIES,
SAND PITS,

And for every
class of
AGRICULTURAL
WORK.



SOLE AGENTS FOR THE UNITED KINGDOM:

ALEXANDER VON GLEHN & Co.,

"Tower House," 40 Trinity Square, LONDON, E.C.

Telephone No. 2,276 AVENUE.

Telegraphic Address—"VONGLEHN," LONDON.

INDEX.

Introduction and General Description, pages 1 to 3.

	PAGES.		PAGES.
A xle Boxes	53	L ight Railway (narrow gauge)	
Axles	54	Caen—Dives	71
B rakes and Harness	52	Loads per Axle	26
Bridges—Portable	58 and 59	L ocomotive No. 1	61
Buffers and Sundries	55	" No. 3	62
C ouplings	55	" No. 6	63
Crossings	5	" No. 8	64
D imensions and Cubic Capacity		" No. 10	65
of Wagons	41	M otor Cars	70
Dismountable Line	4	Motor Cars on Rails (Draisine)	72
G eneral Description	2 and 3	O ff Railers	60
Goods Wagons	66, 67 and 68	P acking	30 and 31
H arness	52	Passenger Carriages	69
Heavy Contractors' and Goods		Points and Crossings	5
Wagons	66, 67 and 68	Portable Bridges	58 and 59
Line. With full description as follows:		R oller Bearings	53
Line No. 0	6	S tandards for Tip Wagons	54
" No. 1	7	T ipping Boxes	54
" No. 3	8	Tramway Rail A and B	27
" No. 4	9	Turntables	28 and 29
" No. 4bis	10	W agons.	
" No. 4ter	11	(Light Wagons)	30 to 51
" No. 5	12	Side Tipping	38 and 39
" No. 5bis	13	End Tipping	40
" No. 6 and 6bis....	14	All-round Tipping	40
" No. 6ter	15	Double Side Tipping	41
" No. 7	16	Platform Wagons 35, 42, 43, 47, 48	
" No. 8 and 9	17	Agricultural Wagons 36, 37, 51	
" No. 10	18	Goods Wagons	44
" No. 11, 11bis, 11ter	19	Mineral Wagons	45
" No. 12	20	Heavy Wagons	66 to 68
" No. 13 and 13bis	21	Passenger Carriages	69
" No. 14 and 14bis	22	W eighbridges	56 and 57
" No. 15, 15bis, 15ter	23	Wheels, Axles, Standards and	
" No. 16, 16bis, 16ter	24	Boxes	54
" No. 17, 17bis, 17ter	25		

ILLUSTRATED CATALOGUE No. 105.

January, 1905.

"DECAUVILLE"

(Registered Trade Mark.)

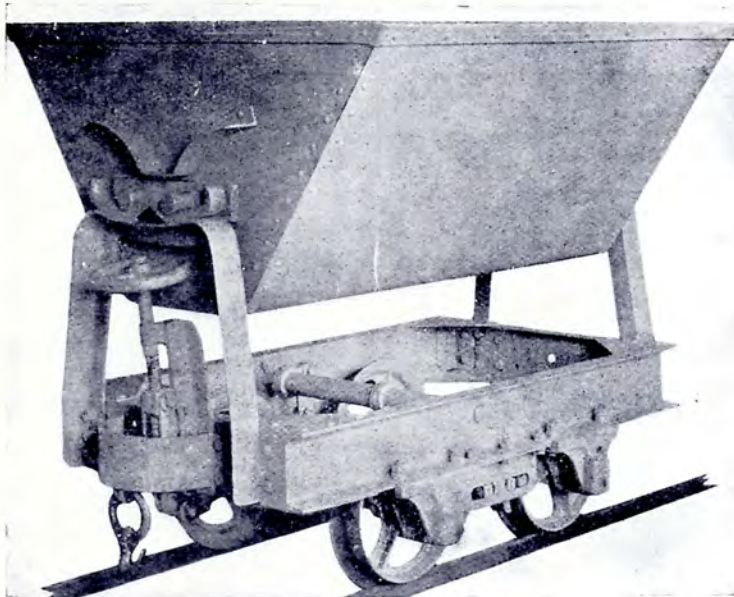
PORTABLE RAILWAY.

As Supplied
to the
BRITISH,
INDIAN,
COLONIAL,
and
FOREIGN
GOVERNMENTS.

*First Outlay very
soon returned.*

*Planned Material and
Installations a
Speciality.*

*Enormous Saving in
Cost of Transport.*



Largely used by
RAILWAY
CONTRACTORS,
DOCK & HARBOUR
CONTRACTORS,
GAS WORKS,
CEMENT WORKS,
BRICK WORKS,
BUILDING WORKS,
TIMBER YARDS,
QUARRIES,
SAND PITS,

And for every
class of
AGRICULTURAL
WORK.



SOLE AGENTS FOR THE UNITED KINGDOM:

ALEXANDER VON GLEHN & Co.,

"Tower House," 40 Trinity Square, LONDON, E.C.

Telephone No. 2,276 AVENUE.

Telegraphic Address—"VONGLEHN," LONDON.

Feld-und Schmalspurbahnen
Verlag und Buchhandel
Karl Paskarb
Landstallmeisterring 22
29227 Celle
Tel. 0 51 41/ 8 39 21
e-Mail: Karl.Paskarb@onlinehome.de

"DECAUVILLE" Portable and Narrow Gauge Railway.

INTRODUCTION.



THE "Decauville" Light Railway Works (**founded in 1876**) having supplied every description of light railway and rolling stock to all parts of the world for a longer period than any of their competitors, the Company have accumulated the greatest possible experience in the design of every class of narrow gauge railway material, and can therefore guarantee the practical efficiency of all plant supplied by them as well as advise customers as to the most suitable material for their special requirements. The extensive plant of the "Decauville" Works devoted exclusively to the manufacture of narrow gauge rolling stock of every description ensures :—

THE HIGHEST STANDARD of quality and workmanship.

QUICK DELIVERY, and LOWEST POSSIBLE PRICES.

. . . SPECIAL QUOTATIONS & ESTIMATES GIVEN IN ALL CASES. . .

The "Decauville" Portable Railway and Rolling Stock has been supplied throughout the United Kingdom and Colonies to

LEADING RAILWAYS, CONTRACTORS, BUILDERS, GAS WORKS, FOUNDRIES, MOTOR GARAGES, ELECTRIC POWER STATIONS, WATERWORKS, DOCKS & PIERS, CHEMICAL, SEWAGE & CEMENT WORKS, QUARRIES, FARMS & MARKET GARDENS, BRICKYARDS, PRIVATE ESTATES, TEA, SUGAR, COCOA, COFFEE & TOBACCO PLANTATIONS, &c., &c.

Further details and information on application to—

ALEXANDER VON GLEHN & Co.,

Sole Agents of the "DECAUVILLE" Co.

(Narrow Gauge Railway and Rolling Stock).

Telephone No. 2276 Avenue.

Telegraphic Address: "VONGLEHN," LONDON.

Offices :—**"TOWER HOUSE," 40 TRINITY SQUARE, LONDON, E.C.**

"DECAUVILLE" Portable and Narrow Gauge Railway.

General Description of the "Decauville" Portable Railway.

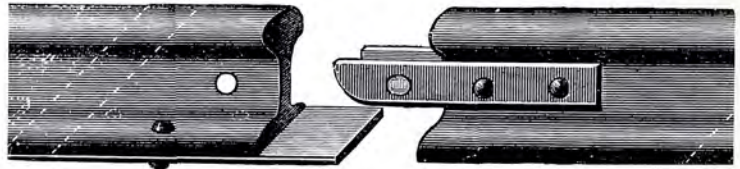
RAILS.—The Rails are invariably of the best quality* of mild steel Vignole section, and the Kilog weights of the "Decauville" sections are per metre, corresponding to about 6 lbs., 10 lbs., 13 lbs., and 15 lbs., or for stronger and permanent tracks to about 20 lbs., 24 lbs., 30 lbs., and 40 lbs., according to section.

LENGTH OF RAIL OR TRACK.—Usual standard lengths: 5 metres (16' 5"), 2½ metres (8' 2½"), 1¼ metres (4' 1¼"). Any special lengths according to requirements.

SLEEPERS.—These are also invariably of steel, and in the case of the lightest portable tracks the Sleepers are dished up in the centre between the Rails, to strengthen the track and give a good hold of the ballast. The heavier tracks are all supplied with channel section Sleepers with either open or closed ends, those with closed ends making a specially stiff track able to resist any tendency to lateral displacement on curves when used on loose sand or soft soil with locomotive traction.

RIVETED LINE.—In all cases of portable Riveted Line, the riveting of the sleepers to rails, and fish plates, etc., to the rails, is done cold with Swedish mild steel rivets closed up by the "Decauville" special machinery for the purpose, and it is impossible to have a better or more durable method of riveting. By this system a Portable Track is obtained capable of carrying the heaviest load in proportion to weight of rail, and considerably in excess of the load which could be carried with the same weight of rail spiked to wood sleepers. For export to any distance where freight is an important consideration the "Decauville" Portable Line is supplied dismantled, with a special clip and bolt attachment, of such a description as to secure the rigidity and truth of the gauge of the track when bolted up, and such that no skilled labour is required for putting together and laying the track at destination.

GENERAL CONSTRUCTION (Hybrid Junction).—The steel flange rails being thus securely riveted to the sleepers at proper intervals, are supplied with fish and base plates firmly attached, one end of the rail being furnished with two fish plates, while the other end has a steel base plate riveted underneath it, and projecting sufficiently to support the end of the corresponding rail of the next section.



LAYING THE RAILS.—To lay the track the ends of two sections are placed together on the ground, and the fish plates will then act as guides, and as a lock between the heads of the rails and base plates, thus forming at once a joint sufficiently rigid and secure to preserve the gauge and enable the track to be used as a temporary system for carrying loads of 6 to 10 cwts. per axle on a 16" or 20" gauge, with 10 to 12 lb. rails respectively. For permanent use the sections should be bolted together with the fish plate bolts. Lines No. 1 and 3 will be found perfectly portable, one man being able to carry a 5 metre length or a crossing with ease, while 4 men can take up 400 yards of track and relay the same again at a distance of 40 yards in one hour.

* Under recent Government Engineers' Inspection, "Decauville" Rails and Fish Plates passed with most satisfactory results a test for tensile strength and elongation.

"DECAUVILLE" Portable and Narrow Gauge Railway.

CROSSINGS.—The crossings are constructed entirely of steel to any radius, and supplied with fixed or movable inside switches. They are made as right or left-handed, as double, symmetrical, or for three lines. When required the Crossings may be fitted with switch throw-over levers and switch box.

CURVES.—The curved sections are also riveted to steel sleepers and constructed to any required radius, and, being supplied with the base and fish plates similar to the straight sections, the curves can be used in either direction.

TURNABLES.—The Portable Turntables are self-contained, and consist of a wrought-iron lower plate, fitted with facing strips and a cast-iron turnplate with a smooth or wheel rutted top, which turns on a pivot. For a 16 inch gauge this pattern turntable weighs about 200 lbs., and the stops fixed on each side serve as handles for the purpose of transporting from place to place. The smooth turnplate is recommended for use on all classes of Contractor's Work, as this type presents the advantage of being always ready to receive the wagons. For heavy work the turntables are manufactured with a cast-iron base, and fitted with roller bearings.

THE ADVANTAGES CLAIMED for the "Decauville" riveted or bolted (dismountable) system are as follows, viz.:—

1. A considerably **longer life** than any other system.
2. Practically **no expense for maintenance, renewals, or supervision.**
3. Requires **no ballasted road**, and can be laid and worked **on any class of soil.**
4. Great **reduction in cost of labour** when laying this line as compared with laying loose rails on wooden sleepers, **no skilled labour being required** in forming the gauge and setting out the curves.
5. Track supplied **complete and ready for laying ; Curves, Crossings,** or any special lengths being manufactured exactly to meet requirements. All plant supplied being fitted together and marked before leaving the works, so that it can be easily laid with the aid of a key plan supplied from our works
6. Considerably **heavier loads carried** than by same weight rail fixed on wood sleepers.

N.B. All gauges measured from inside of Rails, thus :—

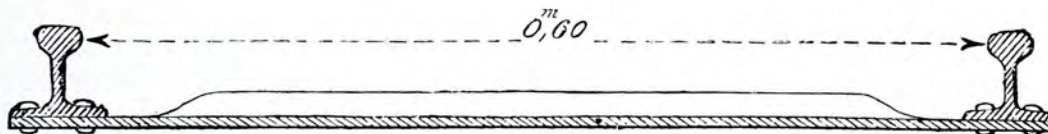


FIG. No. 601.

“DECAUVILLE” Portable and Narrow Gauge Railway.

“Decauville” Portable Railway for Export. Supplied Dismounted for Shipment.

Special attention is called to these Lines for Export to the Colonies, owing to the **saving in freight and inland transport** effected by shipping the line dismantled.

The annexed drawings fully explain the system.

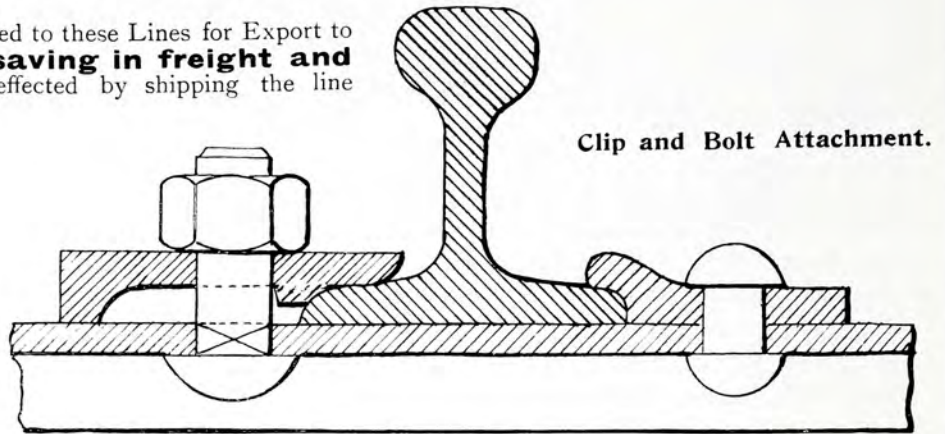


FIG. No. 602.

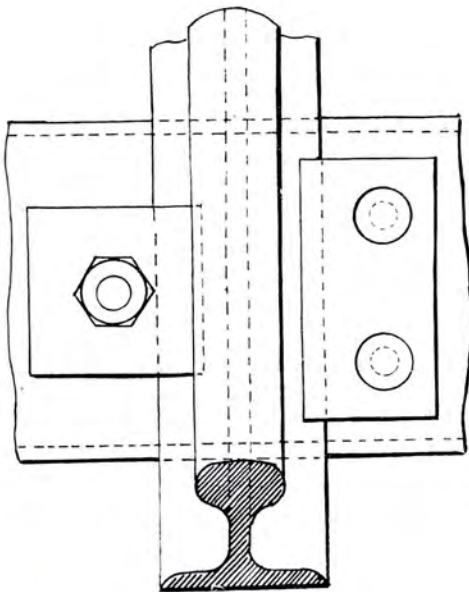


FIG. No. 603.

The CLIP and BOLT attachment when bolted up forms a rigid track, is the most perfect of its kind, and has practically all the advantages of the well-known “Decauville” Portable Riveted Line with but very little extra labour. The sleepers and rails are delivered punched with holes for the bolted attachment and fish plates.

The inner flange of the rails is securely held by a solid clip, machine riveted to the sleepers.

The laying of the track requires **no skilled labour**, as the riveted clip maintains the true gauge, it being only necessary to fasten the one bolt and clip on the outside flange of the rail to hold it in position, and bolt up the fish plates.

PACKING FOR EXPORT

is arranged as follows:—

The Loose **Rails** are wired together in suitable bundles.

The **Sleepers** are wired together in the same manner.

The Loose **Clips, Bolts and Nuts** are packed in wooden cases.

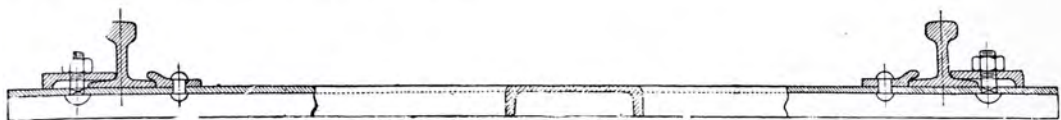


FIG. No. 604.

"DECAUVILLE" Portable and Narrow Gauge Railway.

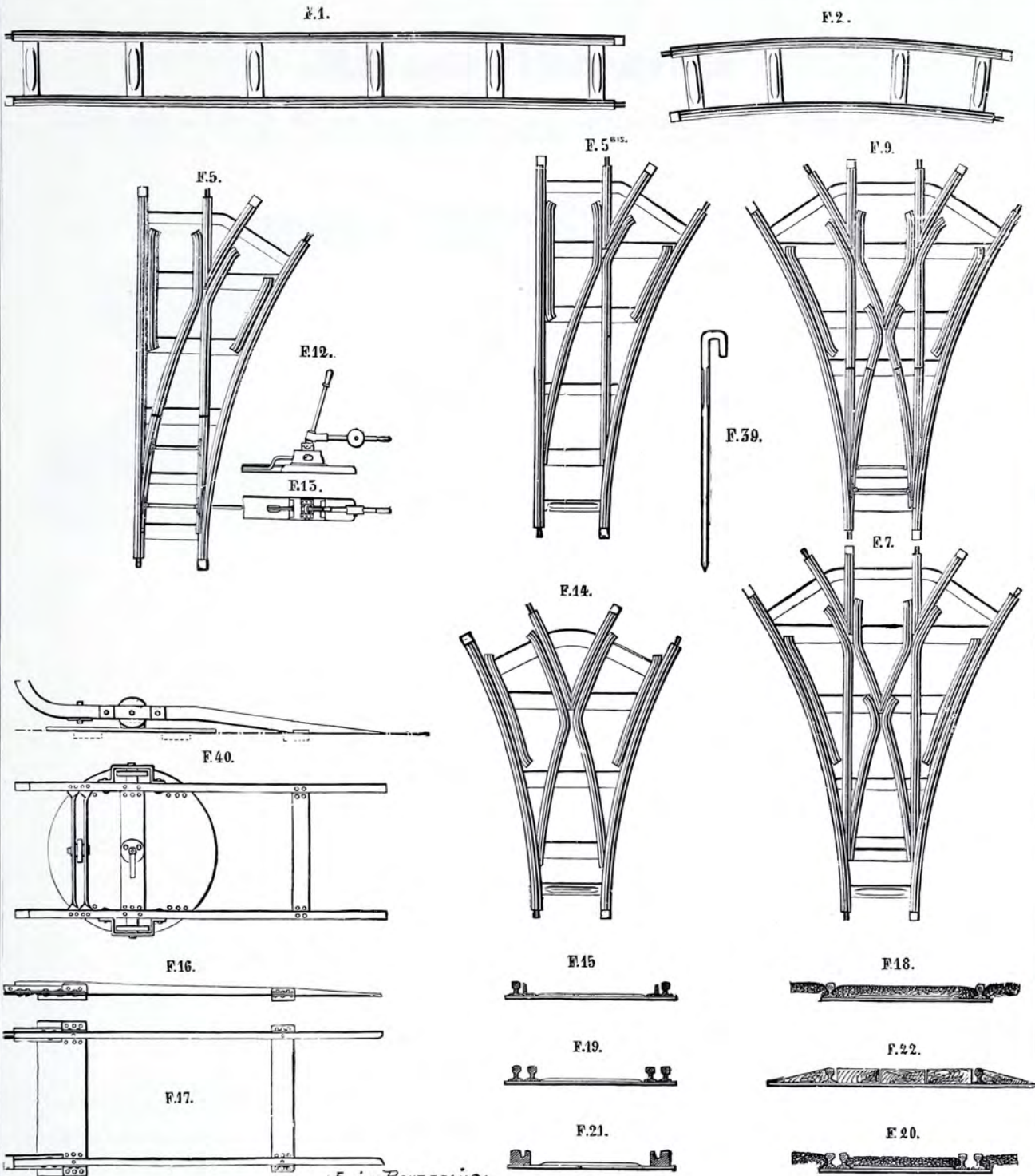


Fig. 1. Straight length, hybrid junction.
 Fig. 2. Curved length, hybrid junction.
 Fig. 5. Right hand crossing with inside movable points.
 Fig. 5bis. Right hand crossing with inside fixed points.
 Fig. 7. Three way crossing with inside fixed points.
 Fig. 9. Three way crossing with inside movable points.
 Fig. 12. Side view of switch moving gear.
 Fig. 13. Plan of the switch and switch gear.
 Fig. 14. Fork crossing with inside fixed points.
 Fig. 15. Section of track with angle iron guard rail.

Fig. 16. Side view of Off-Railer.
 Fig. 17. Plan of Off-Railer.
 Fig. 18. Section of fixed track bedded.
 Fig. 19. Section of track with double rails bedded.
 Fig. 20. Section of track with double rails bedded.
 Fig. 21. Section of wheel rutted or tram rails.
 Fig. 22. Section of portable level crossing.
 Fig. 39. Bar for laying and straightening the rails.
 Fig. 40. Side view of combined turntable and Off-Railer.
 Fig. 41. Plan of ditto.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Line No. 0.

6 lb. Flanged Steel Rails to carry loads up to 4 cwt. per axle.

FULL SIZE SECTION.

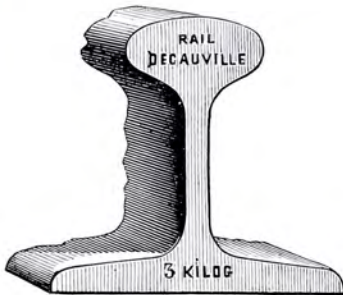


FIG No. 605.

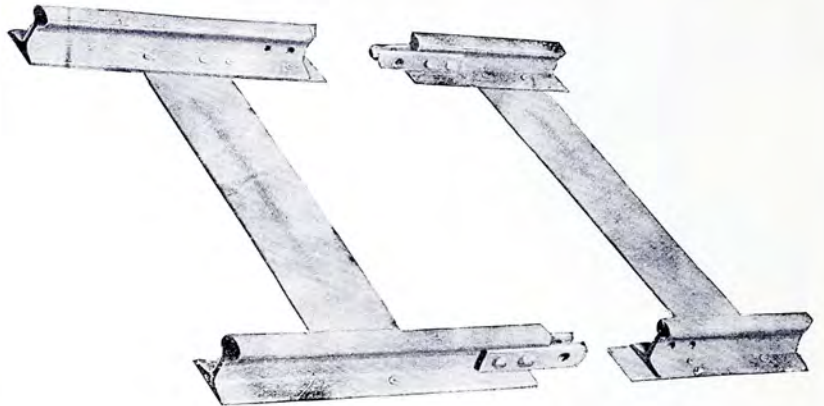


FIG. No. 606.

RIVETED TO STEEL DISHED SLEEPERS ($2\frac{3}{4}$ ins. wide),

THE Rail is machine riveted to FOUR strong steel DISHED sleepers per length of 16 ft. 5 ins. (5 metres). The fish and base plates are also riveted to the rails so as to form a hybrid junction, and allow of the curves being used in either direction, thus enabling the line to be used without bolting up, if desired.

This Line is recommended for use in Small Works and for light loads.

Particulars of this Line, Crossings, &c., as usually supplied.

Straight Line, in lengths of 5 metres (16 ft. 5 ins.)	Crossings to right or left, with Inside Movable Switches, 13, 20, or 26 ft. radius.
„ „ short lengths, $2\frac{1}{2}$ metres (8 ft. $2\frac{1}{2}$ ins.)	Ditto, but with fixed Switches.
„ „ „ „ $1\frac{1}{4}$ metres (4 ft. $1\frac{1}{4}$ ins.)	Fork and 3-Way Crossings, etc., etc.
Curved Line, in lengths of $2\frac{1}{2}$ metres (8 ft. $2\frac{1}{2}$ ins.)	Turntable, with smooth or wheel-rutted Turnplate.
„ „ „ „ $1\frac{1}{4}$ metres (4 ft. $1\frac{1}{4}$ ins.)	

Fish Plate Bolts included in all Estimates. The Rails and Sleepers are supplied painted with Red Lead.

Gauge of Line measured between the rails. Radius of Curves measured from the centre of gauge. Length of Curves measured from outer rail.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Line No. 1.

10 lb. Flanged Steel Rails to carry loads up to 6 cwt. per axle.

FULL SIZE SECTION.



FIG. No. 607.

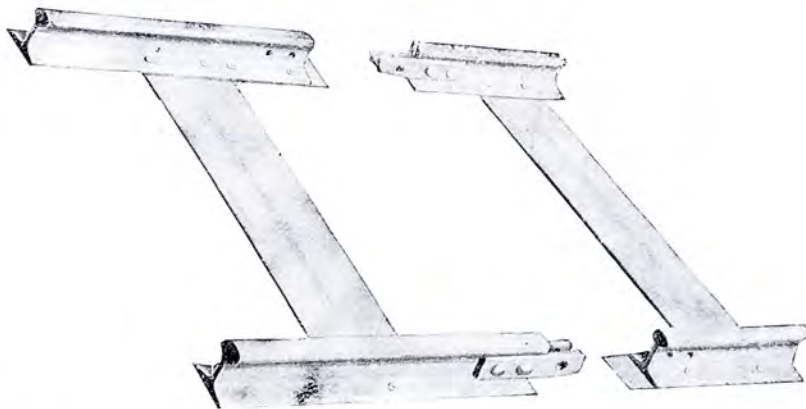


FIG. No. 608.

RIVETED TO STEEL DISHED SLEEPERS ($3\frac{9}{16}$ ins. wide),
about 3 lbs., $3\frac{1}{2}$ lbs., and $4\frac{1}{4}$ lbs., according to gauge.

THE Rail is machine riveted to FIVE strong steel DISHED sleepers per length of 16 ft. 5 ins. (5 metres). The fish and base plates are also riveted to the rails so as to form a hybrid junction, and allow of the curves being used in either direction, thus enabling the line to be used without bolting up, if desired.

This Line is a perfectly PORTABLE SYSTEM, and has been designed to supersede barrow and plank work. It has been supplied to Cement, Lime, Brick and Chemical Works, as also to Water Works, for the purpose of renewing the filter beds, etc. It is specially adapted for use on every description of Contractor's Work entailing the transport of material in the construction of Railway Embankments, Cuttings, Harbours, Docks, Canals, and every other kind of earthwork, etc.

Particulars of this Line, Crossings, &c., as usually supplied.

Straight Line, in lengths of 5 metres (16 ft. 5 ins.)	|	Crossings to right or left, with Inside Movable Switches, 13, 20, or 26 ft. radius.
" " short lengths, $2\frac{1}{2}$ metres (8 ft. $2\frac{1}{2}$ ins.)		Ditto, but with fixed Switches.
" " " " $1\frac{1}{4}$ metres (4 ft. $1\frac{1}{4}$ ins.)		Fork and 3-Way Crossings, etc., etc.
Curved Line, in lengths of $2\frac{1}{2}$ metres (8 ft. $2\frac{1}{2}$ ins.)		Turntable, with smooth or wheel-rutted Turnplate.
" " " " $1\frac{1}{4}$ metres (4 ft. $1\frac{1}{4}$ ins.)		

Fish Plate Bolts included in all Estimates. The Rails and Sleepers are supplied painted with Red Lead.

Gauge of Line measured between the rails. Radius of Curves measured from the centre of gauge. Length of Curves measured from outer rail.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Line No. 3.

10 lb. Flanged Steel Rails to carry loads up to 10 cwt. per axle.

FULL SIZE SECTION.

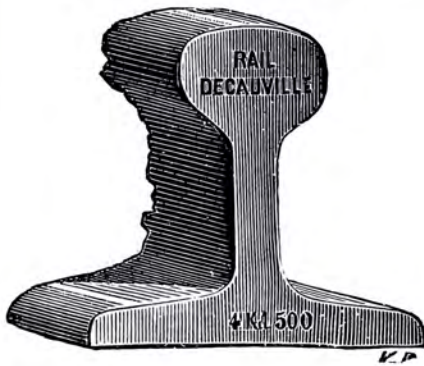


FIG. No. 609.

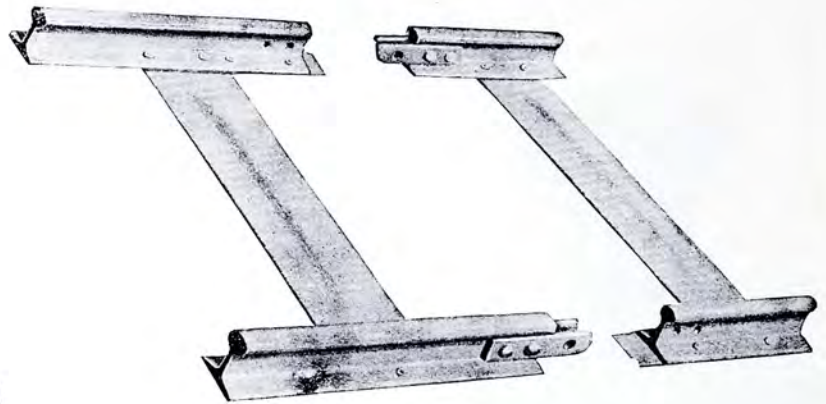


FIG. No. 610.

RIVETED TO STEEL DISHED SLEEPERS ($3\frac{9}{16}$ ins. wide).
about 3 lbs., $3\frac{1}{2}$ lbs., and $4\frac{1}{4}$ lbs., according to gauge.

THE Rail is machine riveted to SIX strong steel DISHED sleepers per length of 16 ft. 5 ins. (5 metres). The fish and base plates are also riveted to the rails so as to form a hybrid junction, and allow of the curves being used in either direction, thus enabling the line to be used without bolting up, if desired.

This Line is especially recommended, and is supplied to Cement, Gas, Brick, and other Works, *e.g.*, Quarries, &c., for heavy transport work on rough ground. It has also been supplied to Farms and Landed Estates for carriage and distribution of agricultural produce, manures, &c. It is well adapted to Contractors as a PORTABLE SYSTEM, where heavier work and loads have to be dealt with than in the case of Line No 1.

Particulars of this Line, Crossings, &c., as usually supplied.

Straight Line, in lengths of 5 metres (16 ft. 5 ins.)	Crossings to right or left, with Inside Movable Switches, 13, 20, or 26 ft. radius.
" " short lengths, $2\frac{1}{2}$ metres (8 ft. $2\frac{1}{2}$ ins.)	Ditto, but with fixed Switches.
" " " " $1\frac{1}{4}$ metres (4 ft. $1\frac{1}{4}$ ins.)	Fork and 3-Way Crossings, etc., etc.
Curved Line, in lengths of $2\frac{1}{2}$ metres (8 ft. $2\frac{1}{2}$ ins.)	Turntable, with smooth or wheel-rutted Turnplate.
" " " " $1\frac{1}{4}$ metres (4 ft. $1\frac{1}{4}$ ins.)	

Fish Plate Bolts included in all Estimates. The Rails and Sleepers are supplied painted with Red Lead.

Gauge of Line measured between the Rails. Radius of Curves measured from the centre of gauge. Length of Curves measured from outer rail.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Line No. 4.

10 lb. Flanged Steel Rails to carry loads up to 12 cwt. per axle.

FULL SIZE SECTION.



FIG. No. 611.

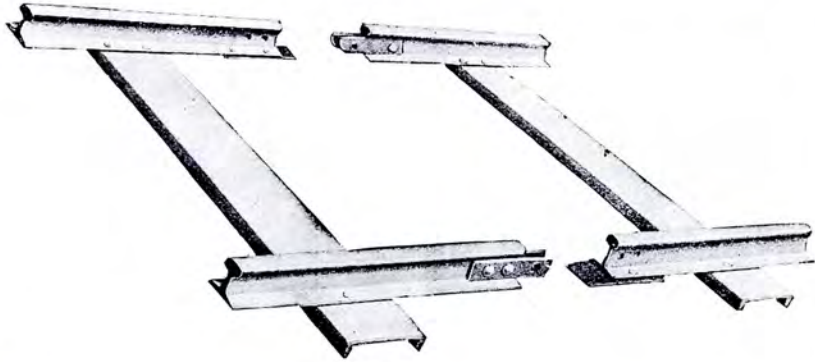


FIG. No. 612.

RIVETED TO CHANNEL STEEL SLEEPERS ($3\frac{7}{16}$ ins. wide by $\frac{3}{4}$ in., extending on each side), weighing about 5 lbs., $5\frac{3}{4}$ lbs., $6\frac{5}{8}$ lbs., according to gauge.

THE Rail is machine riveted or bolted to SIX strong steel CHANNEL sleepers per length of 16 ft. 5 in. (5 metres). The fish and base plates are also riveted to the rails so as to form a hybrid junction, and allow of the curves being used in either direction, thus enabling the line to be used without bolting up if desired.

This Line is recommended as a PERMANENT SYSTEM.

Particulars of this Line, Crossings, &c., as usually supplied.

Straight Line, in lengths of 5 metres (16 ft. 5 ins.)	Crossings to right or left, with Inside Movable Switches, 13, 20, or 26 ft. radius.
„ „ short lengths, $2\frac{1}{2}$ metres (8 ft. $2\frac{1}{2}$ ins.)	As above, but with fixed Switches.
„ „ „ „ $1\frac{1}{4}$ metres (4 ft. $1\frac{1}{4}$ ins.)	Ordinary Crossing. (For Special Crossings, see page 5),
Curved Line, in lengths of $2\frac{1}{2}$ metres (8 ft. $2\frac{1}{2}$ ins.)	Outside Movable Switch for above.
„ „ „ „ $1\frac{1}{4}$ metres (4 ft. $1\frac{1}{4}$ ins.)	Turntable, with smooth or wheel-rutted Turnplate (For Special Turntables, see page 29).

Fish Plate Bolts included in all Estimates. The Rails and Sleepers are supplied painted with Red Lead.

Gauge of Line measured between the rails. Radius of Curves measured from inner rail. Length of Curves measured from outer rail.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Line No. 4^{BIS}.

13 lb. Flanged Steel Rails to carry loads up to 16 cwt. per axle.

FULL SIZE SECTION.

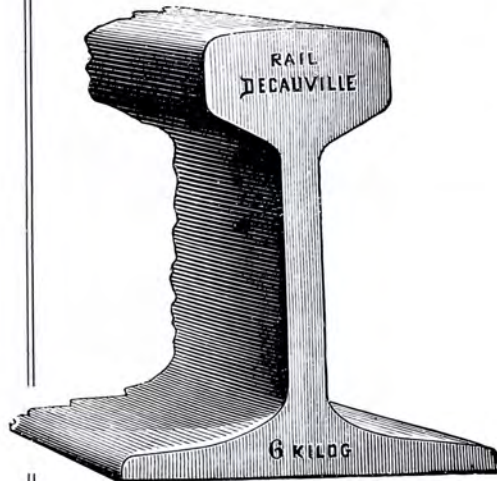


FIG. No. 613.

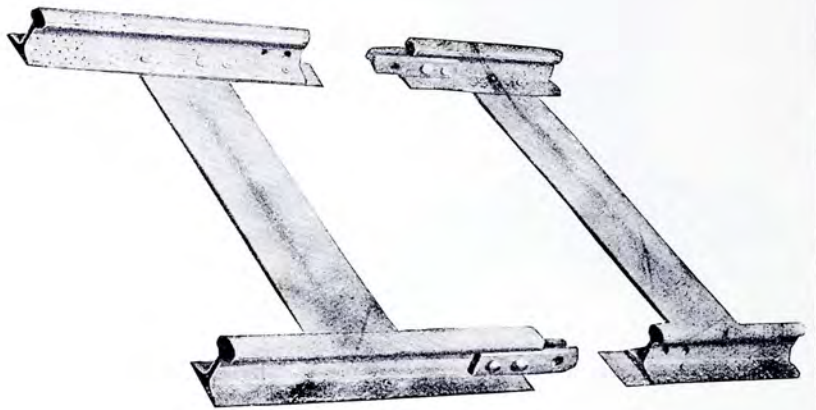


FIG. No. 614.

STEEL DISHED SLEEPERS ($3\frac{3}{4}$ ins. wide).

Weighing about $4\frac{3}{4}$ lbs., $5\frac{5}{8}$ lbs., and $7\frac{1}{2}$ lbs., according to gauge.

THE Rail is machine riveted to SIX strong steel DISHED sleepers, per length of 16 ft. 5 ins. (5 metres). The fish and base plates are also riveted to the rails so as to form a hybrid junction, and allow of the curves being used in either direction, thus enabling the line to be used without bolting up, if desired.

This Line is recommended for the same purposes as Line No. 3, for hard work on rough ground.

Particulars of this Line, Crossings, &c., as usually supplied.

Straight Line, in lengths of 5 metres (16 ft. 5 ins.)	Crossings to right or left, with Inside Movable Switches, 13, 20, or 26 ft. radius.
" " short lengths, $2\frac{1}{2}$ metres (8 ft. $2\frac{1}{2}$ ins.)	Ditto, but with fixed Switches.
" " " " $1\frac{1}{4}$ metres (4 ft. $1\frac{1}{4}$ ins.)	Fork and 3-Way Crossings, etc., etc.
Curved Line, in lengths of $2\frac{1}{2}$ metres (8 ft. $2\frac{1}{2}$ ins.)	Turntable, with smooth or wheel-rutted Turnplate.
" " " " $1\frac{1}{4}$ metres (4 ft. $1\frac{1}{4}$ ins.)	

Fish Plate Bolts included in all Estimates. The Rails and Sleepers are supplied painted with Red Lead.

Gauge of Line measured between the rails. Radius of Curves measured from the centre of gauge. Length of Curves measured from outer rail.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Line No. 4^{TER.}

13 lb. Flanged Steel Rails to carry loads up to 30 cwt. per axle.

FULL SIZE SECTION.

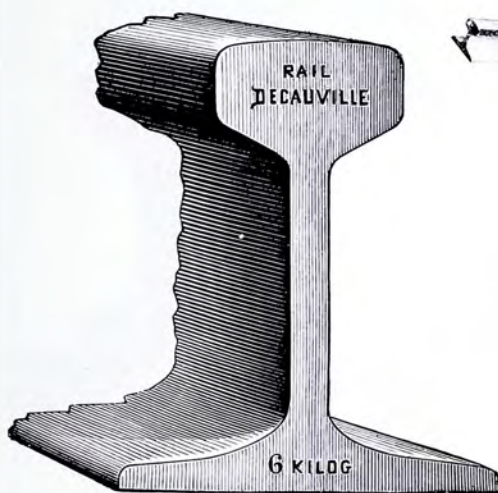


FIG. No. 615.

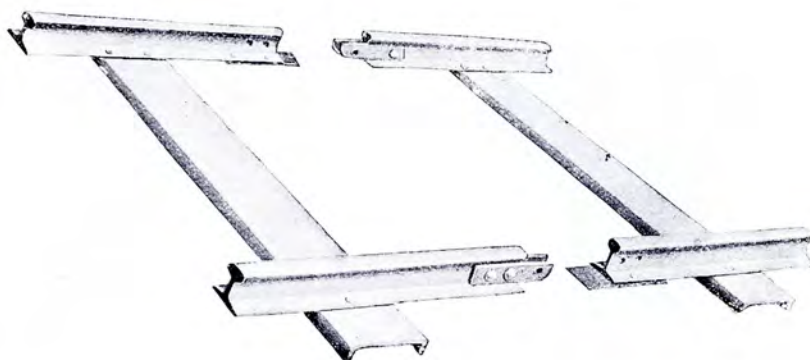


FIG. No. 616.

RIVETED TO STEEL CHANNEL SLEEPERS ($4\frac{1}{8}$ ins. wide by $\frac{3}{4}$ in. deep, extending on each side), weighing about $7\frac{3}{4}$ lbs., $8\frac{1}{2}$ lbs., 10 lbs., according to gauge.

THE Rail is machine riveted or bolted to SIX strong steel CHANNEL sleepers per length of 16 ft. 5 ins. (5 metres). The fish and base plates are also riveted to the rails so as to form a hybrid junction, and allow of the curves being used in either direction, thus enabling the line to be used without bolting up, if desired.

This Line is recommended as a light PERMANENT LINE.

Particulars of this Line, Crossings, &c., as usually supplied.

Straight Line, in lengths of 5 metres (16 ft. 5 ins.)	Crossings to right or left, with Inside Movable Switches, 13, 20, or 26 ft. radius.
„ „ short lengths, $2\frac{1}{2}$ metres (8 ft. $2\frac{1}{2}$ ins.)	Ditto, but with fixed switches.
„ „ „ „ $1\frac{1}{4}$ metres (4 ft. $1\frac{1}{4}$ ins.)	Fork and 3-way Crossings, etc., etc.
Curved line, in lengths of $2\frac{1}{2}$ metres (8 ft. $2\frac{1}{2}$ ins.)	Turntable, with smooth or wheel-rutted Turnplate.
„ „ „ „ $1\frac{1}{4}$ metres (4 ft. $1\frac{1}{4}$ ins.)	

Fish Plate Bolts included in all Estimates. The Rails and Sleepers are supplied painted with Red Lead.

Gauge of Line measured between the rails. Radius of Curves measured from the centre of gauge. Length of Curves measured from outer rail.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Line No. 5.

15 lb. Flanged Steel Rails to carry loads up to 20 cwt. per axle.

FULL SIZE SECTION.

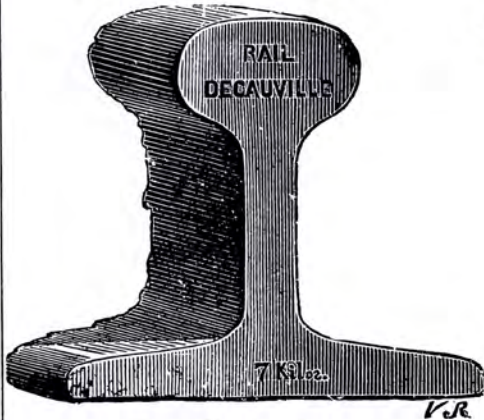


FIG. No. 617.

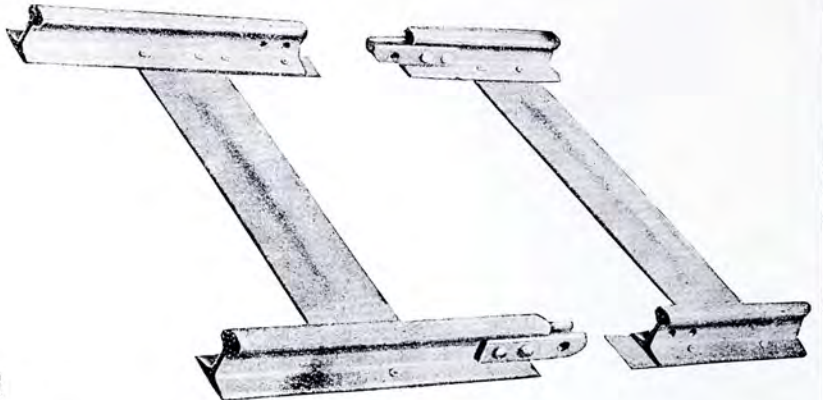


FIG. No. 618.

RIVETED TO STEEL DISHED SLEEPERS ($3\frac{3}{4}$ ins. wide).
Weighing about $4\frac{3}{4}$ lbs., $5\frac{5}{8}$ lbs., $7\frac{1}{2}$ lbs., according to gauge.

THE Rail is machine riveted to SIX strong steel DISHED sleepers per length of 16 ft. 5 ins. (5 metres). The fish and base plates are also riveted to the rails so as to form a hybrid junction, and allow of the curves being used in either direction, thus enabling the line to be used without bolting up, if desired.

This line has been supplied both as a movable and permanent line for heavy Transport Work, and general use on Cement, Gas, Water Works, Sand Pits, &c.; and is also specially adapted for Colonial Plantations (Sugar, Tea, Coffee, Hemp, &c.). It has also been supplied to Colonial Governments for use as a NARROW GAUGE transport line on Piers, Quays, and Docks; and to Contractors as a PORTABLE SYSTEM for every description of heavy work, for use with hand or animal traction, superseding horse and cart work. The advantages gained being:—

- (1) That one horse will draw four times the load, and
- (2) That the breaking up of the roadway by cart-wheels is avoided.

Particulars of this Line, Crossings, &c., as usually supplied.

Straight Line, in lengths of 5 metres (16 ft. 5 ins.) " " short lengths, $2\frac{1}{2}$ metres (8 ft. $2\frac{1}{2}$ ins.) " " " " $1\frac{1}{4}$ metres (4 ft. $1\frac{1}{4}$ ins.) Curved Line, in lengths of $2\frac{1}{2}$ metres (8 ft. $2\frac{1}{2}$ ins.) " " " " $1\frac{1}{4}$ metres (4 ft. $1\frac{1}{4}$ ins.)	Crossings to right or left, with inside movable Switches, 13, 20, or 26 ft. radius. Ditto, but with fixed switches. Fork and 3-Way Crossings, etc., etc. Turntable, with smooth or wheel-rutted Turnplate.
---	--

Fish Plate Bolts included in all Estimates. The Rails and Sleepers are supplied painted with Red Lead.

Gauge of Line measured between the rails. Radius of Curves measured from the centre of gauge. Length of Curves measured from outer rail.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Line No. 5^{BIS}.

15 lb. Flanged Steel Rails to carry loads up to 20 cwt. per axle.

FULL SIZE SECTION.

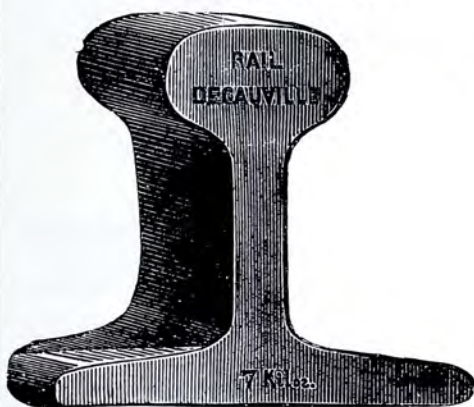


FIG. No. 619.

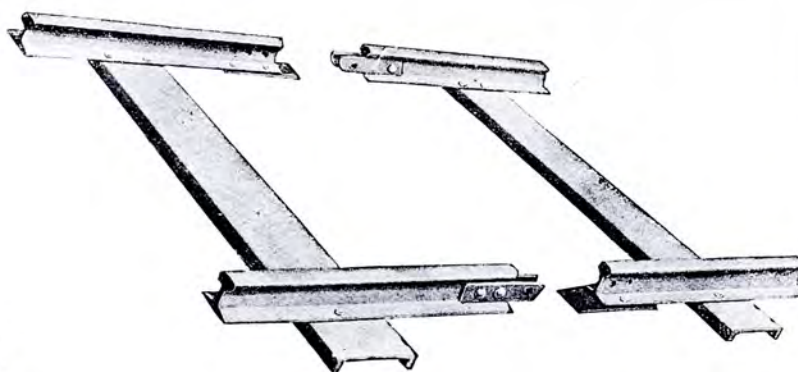


FIG. No. 620.

RIVETED TO STEEL CHANNEL SLEEPERS ($3\frac{3}{8}$ ins. \times $\frac{3}{4}$ ins. extending on each side) weighing about 5 lbs., $5\frac{3}{4}$ lbs., and $6\frac{5}{8}$ lbs., according to gauge.

THE Rail is machine riveted to SIX strong steel CHANNEL sleepers per length of 16 ft. 5 in. (5 metres). The fish and base plates are also riveted to the rails so as to form a hybrid junction, and allow of the curves being used in either direction, thus enabling the line to be used without bolting up, if desired.

This line has been supplied both as a movable and permanent line for heavy Transport Work, and general use on Cement, Gas, Water Works, Sand Pits, &c.; and is also specially adapted for Colonial Plantations (Sugar, Tea, Coffee, Hemp, &c.) It has also been supplied to Colonial Governments for use as a NARROW GAUGE transport line on Piers, Quays, and Docks; and to Contractors as a PORTABLE SYSTEM for every description of heavy work, for use with hand or animal traction, superseding horse and cart work. The advantages gained being:—

- (1) That one horse will draw four times the load, and
- (2) That the breaking up of the roadway by cart-wheels is avoided.

Particulars of this Line, Crossings, &c., as usually supplied.

<p>Straight Line, in lengths of 5 metres (16 ft. 5 ins.) " " short lengths, $2\frac{1}{2}$ metres (8 ft. $2\frac{1}{2}$ ins.) " " " " $1\frac{1}{4}$ metres (4 ft. $1\frac{1}{4}$ ins.) Curved Line, in lengths of $2\frac{1}{2}$ metres (8 ft. $2\frac{1}{2}$ ins.) " " " " $1\frac{1}{4}$ metres (4 ft. $1\frac{1}{4}$ ins.)</p>	<p>Crossings to right or left, with Inside Movable Switches, 13, 20, or 26 ft. radius. Ditto, but with fixed Switches. Fork and 3-Way Crossings, etc., etc. Turntable, with smooth or wheel-rutted Turnplate.</p>
--	--

Fish Plate Bolts included in all Estimates. The Rails and Sleepers are supplied painted with Red Lead.

Gauge of Line measured between the rails. Radius of Curves measured from the centre of gauge. Length of Curves measured from outer rail.

“DECAUVILLE” Portable and Narrow Gauge Railway.

— **Line No. 6.** —

15 lb. Flanged Steel Rails to carry loads up to 30 cwt. per axle.

FULL SIZE SECTION.

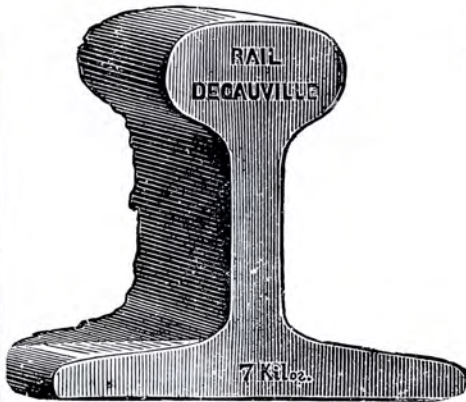


FIG. No. 621.

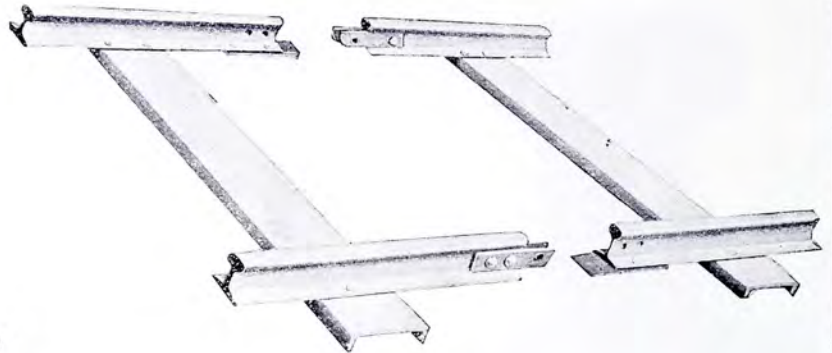


FIG. No. 622.

RIVETED TO STEEL CHANNEL SLEEPERS ($4\frac{1}{8}$ ins. wide, $\times \frac{3}{4}$ ins., extending on each side), weighing about $7\frac{3}{4}$ lbs., $8\frac{1}{2}$ lbs., 10 lbs., according to gauge.

THE Rail is machine riveted or bolted to SIX strong steel CHANNEL sleepers per length of 16 ft. 5 ins. (5 metres). The fish and base plates are also riveted to the rails so as to form a hybrid junction, and allow of the curves being used in either direction, thus enabling the line to be used without bolting up, if desired.

This Line is recommended for the same purposes as Line No. 5, for **hard work** on **rough ground**.

Particulars of this Line, Crossings, &c., as usually supplied (see opposite page).

— **Line No. 6^{BIS}.** —

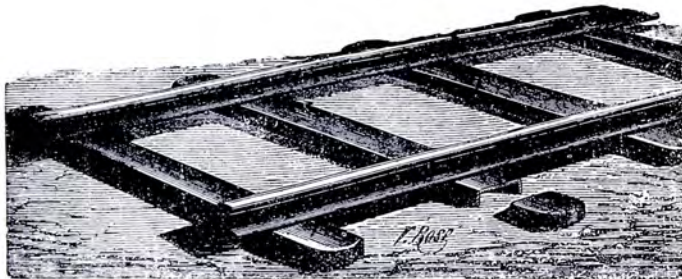


FIG. No. 623.

The rail is machine riveted or bolted to 6 channel steel sleepers as line No. 6, but the ends of the sleepers are closed in such a way as to afford a good hold of the ballast.

This Line is specially recommended for use on soft or sandy soils.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Line No. 6^{TER.}

20 lb. Flanged Steel Rails to carry loads up to 40 cwt. per axle.

FULL SIZE SECTION RAIL AND SLEEPER.

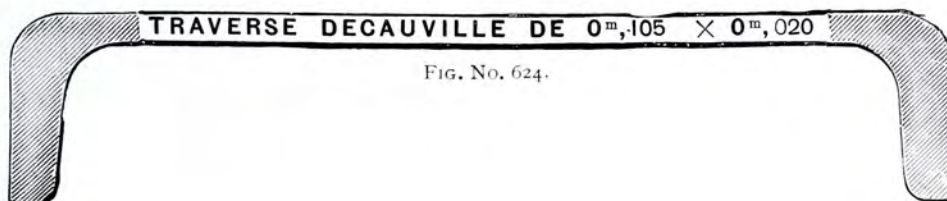


FIG. No. 624.

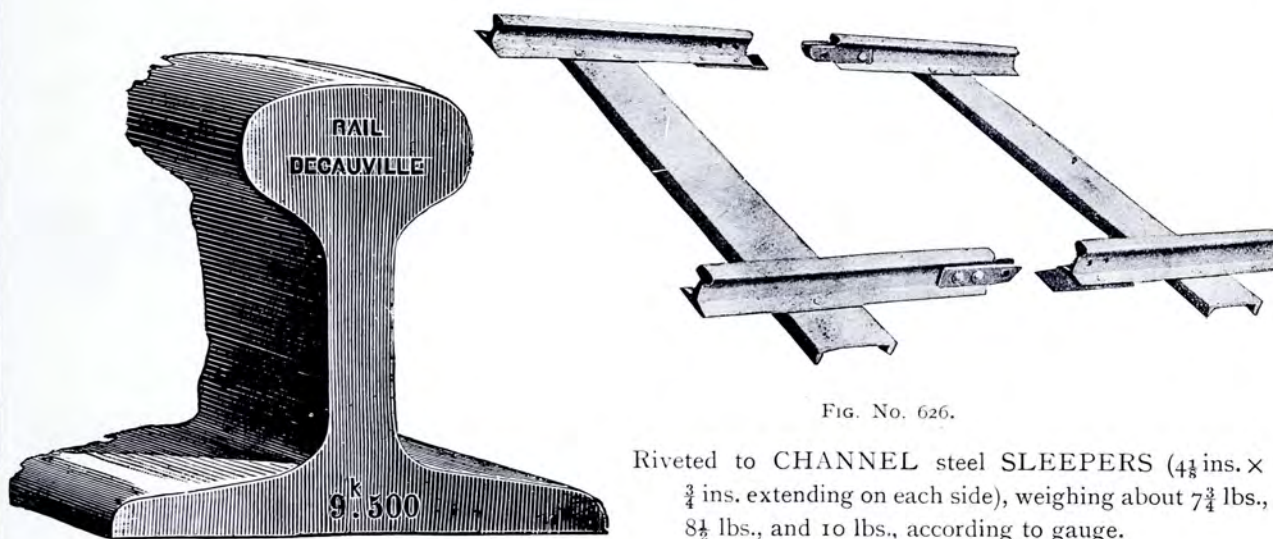


FIG. No. 626.

Riveted to CHANNEL steel SLEEPERS ($4\frac{1}{2}$ ins. \times $\frac{3}{4}$ ins. extending on each side), weighing about $7\frac{3}{4}$ lbs., $8\frac{1}{2}$ lbs., and 10 lbs., according to gauge.

FIG. No. 625.

THE Rail is machine riveted or bolted to SIX strong steel CHANNEL sleepers per length of 16 ft. 5 ins. (5 metres). The fish and base plates are also riveted to the rails so as to form a hybrid junction, and allow of the curves being used in either direction, thus enabling the line to be used without bolting up, if desired.

Particulars of this Line, Crossings, &c., as usually supplied.

Straight Line, in lengths of 5 metres (16 ft. 5 ins.)	Crossings to right or left, with Inside Movable Switches, 33, 66, 99, or 165 ft. radius.
„ „ short lengths, $2\frac{1}{2}$ metres (8 ft. $2\frac{1}{2}$ ins.)	Fork and 3-Way Crossings, etc., etc.
„ „ „ „ $1\frac{1}{4}$ metres (4 ft. $1\frac{1}{4}$ ins.)	Turntable, with wheel-rutted Turnplate.
Curved line, in lengths of $2\frac{1}{2}$ metres (8 ft. $2\frac{1}{2}$ ins.)	
„ „ „ „ $1\frac{1}{4}$ metres (4 ft. $1\frac{1}{4}$ ins.)	

Fish Plate Bolts included in all Estimates. The Rails and Sleepers are supplied painted with Red Lead.

Gauge of Line measured between the rails. Radius of Curves measured from the centre of gauge. Length of Curves measured from outer rail.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Line No. 7.

20 lb. Flanged Steel Rails to carry loads up to 40 cwt. per axle.

FULL SIZE SECTION.

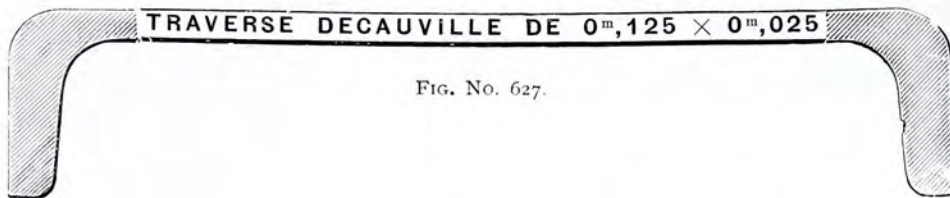


FIG. No. 627.



FIG. No. 628.

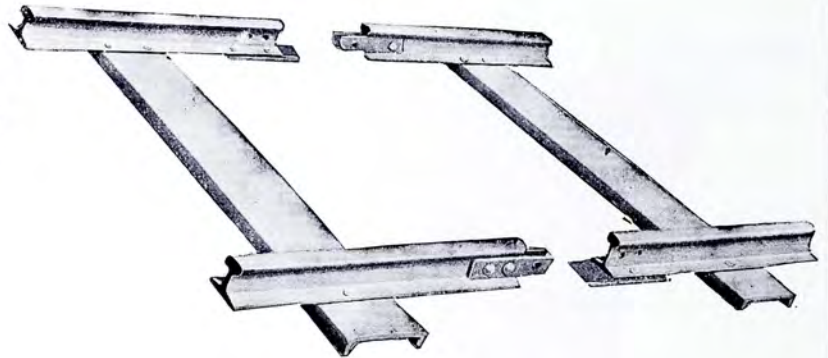


FIG. No. 629.

RIVETED TO STEEL CHANNEL SLEEPERS
($4\frac{1}{8}$ ins. wide, $\times 1$ in., extending on each side), weighing
about 11 lbs., $12\frac{1}{4}$ lbs., $14\frac{1}{4}$ lbs., according to gauge.

THE Rail is machine riveted or bolted to SIX strong steel CHANNEL sleepers per length of 16 ft. 5 ins. ($\frac{5}{2}$ metres). The fish and base plates are bolted and riveted to the rails so as to form a hybrid junction, and allow of the curves being used in either direction.

This Line has already been supplied to Gas Works, Sugar-cane Plantations, and Heavy Earth Works, for use with animal traction and small Locomotives.

Particulars of this Line, Crossings. &c., as usually supplied.

Straight Line, in lengths of 5 metres (16 ft. 5 ins.)
 „ „ short lengths, $2\frac{1}{2}$ metres (8 ft. $2\frac{1}{2}$ ins.)
 „ „ „ „ $1\frac{1}{4}$ metres (4 ft. $1\frac{1}{4}$ ins.)
 Curved Line, in lengths of $2\frac{1}{2}$ metres (8 ft. $2\frac{1}{2}$ ins.)
 „ „ „ „ $1\frac{1}{4}$ metres (4 ft. $1\frac{1}{4}$ ins.)

Crossings to right or left, with Inside Movable
Switches, 33, 66, 99, or 165 ft. radius.

Ordinary Crossing. (For Special Crossings, see page 5.)

Turntable, with wheel-rutted Turnplate.

(For Special Turntables, see page 29.)

Fish Plate Bolts included in all Estimates. The Rails and Sleepers are supplied painted with Red Lead.

Gauge of Line measured between the rails. Radius of Curves measured from inner rail. Length of Curves measured from outer rail.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Line No. 8.

20 lb. Flanged Steel Rails to carry loads up to 40 cwt. per axle.

FULL SIZE SECTION.

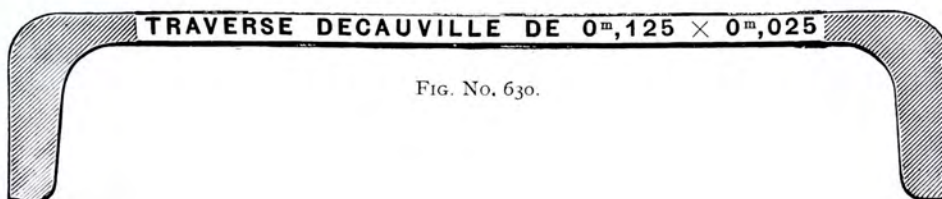


FIG. No. 630.



FIG. No. 631.

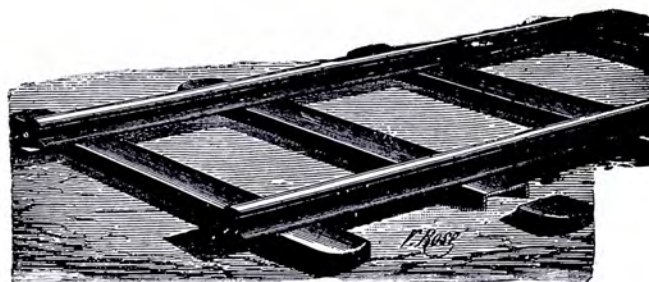


FIG. No. 632.

RIVETED TO CHANNEL STEEL SLEEPERS
with closed ends ($4\frac{1}{8}$ in. by 1 in.)

THE Rail is machine riveted or bolted to SIX strong steel CHANNEL sleepers per length of 16 ft. 5 in. (5 metres).

The sleepers have their ends closed by a special process, the advantages being that they retain a firm grip of the ballast or soil and offer great resistance to lateral displacement on curves, especially when used for locomotive traction.

This Line is specially recommended for use on soft or sandy soil, and for LOCOMOTIVE TRACTION.

Line No. 9.

20 lb. Flanged Steel Rails to carry loads up to 60 cwt. per axle.

This is the same as the above (Line No. 8) but has EIGHT sleepers per length and will therefore carry a much greater load.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Line No. 10.

20 lb. Flanged Steel Rails to carry loads up to 3 tons per axle.

FULL SIZE SECTION.

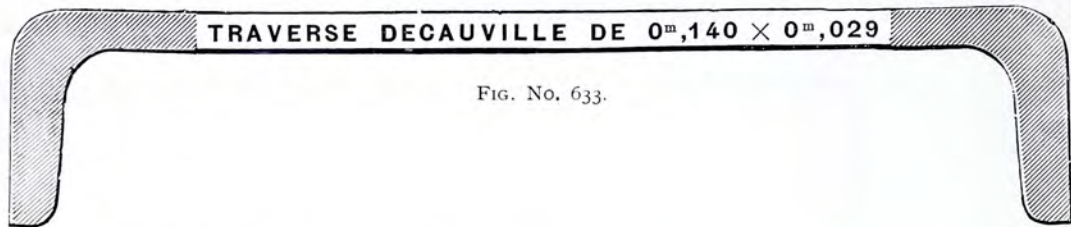


FIG. No. 633.

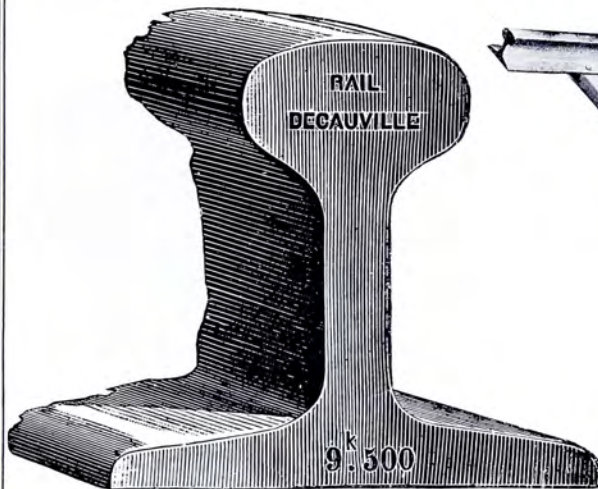


FIG. No. 634.

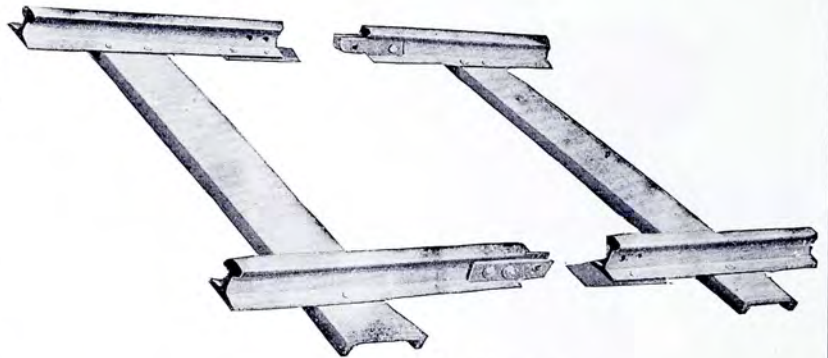


FIG. No. 635.

RIVETED TO CHANNEL STEEL SLEEPERS
(5½ ins. × 1⅛ ins., extending on each side).

THE Rail is riveted to EIGHT CHANNEL steel sleepers per length of 16 ft. 5 ins. (5 metres). The fish and base plates are also riveted to the rails so as to form a hybrid junction, and allow of the curves being used in either direction, thus enabling the line to be used without bolting up, if desired.

This line is recommended as a light PERMANENT LINE.

Particulars of this Line, Crossings, &c., as usually supplied.

Straight Line, in lengths of 5 metres (16 ft. 5 ins.)	Crossings to right or left, with Inside Movable
" " short lengths, 2½ metres (8 ft. 2½ ins.)	Switches, 66, or 99 ft. radius.
" " " " 1¼ metres (4 ft. 1¼ ins.)	Fork and 3-Way Crossings, etc., etc.
Curved Line, in lengths of 2½ metres (8 ft. 2½ ins.)	Turntable, with wheel-rutted Turnplate.
" " " " 1¼ metres (4 ft. 1¼ ins.)	

Fish Plate Bolts included in all Estimates. The Rails and Sleepers are supplied painted with Red Lead.

Gauge of Line measured between the rails. Radius of Curves measured from the centre of gauge. Length of Curves measured from outer rail.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Line No. 11.

20 lb. Flanged Steel Rails to carry loads up to $3\frac{1}{2}$ tons per axle.

FULL SIZE SECTION.

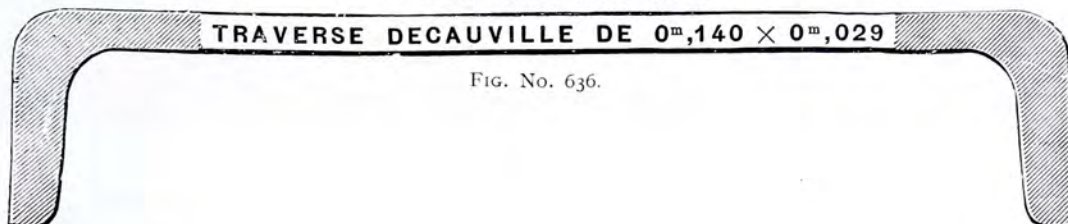


FIG. No. 636.

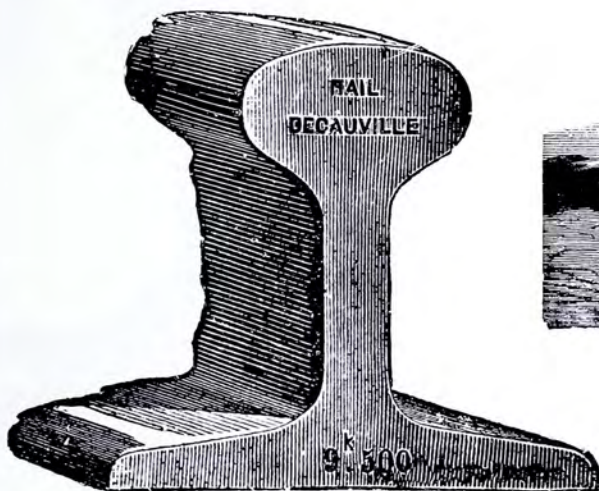


FIG. No. 637.

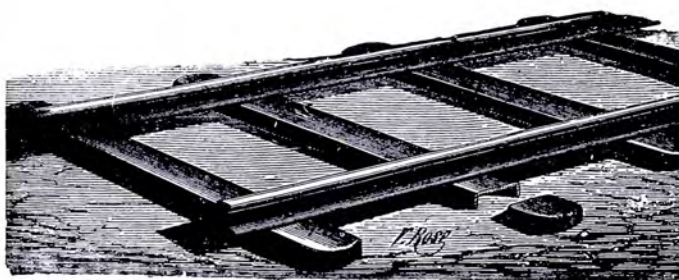


FIG. No. 638.

RIVETED TO CHANNEL STEEL SLEEPERS with closed ends ($5\frac{1}{2}$ ins. by $1\frac{1}{8}$ ins. extending on each side).

THE Rail is machine riveted or bolted to EIGHT strong steel CHANNEL sleepers per length of 16 ft. 5 ins. (5 metres).

The sleepers have their ends closed by a special process, the advantages being that they retain a firm grip of the ballast or soil, and offer great resistance to lateral displacement on curves, especially when used for locomotive traction.

This Line is specially recommended for use on soft or sandy soil and for LOCOMOTIVE TRACTION.

Line No. 11^{BIS.}

20 lb. Flanged Steel Rails to carry loads up to 3 tons per axle.

This Line is the same as above (No. 11), but has only SEVEN sleepers per length.

Line No. 11^{TER.}

20 lb. Flanged Steel Rails to carry loads up to $2\frac{1}{4}$ tons per axle.

This Line is the same as the above (No. 11), but has only SIX sleepers per length.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Line No. 12.

24 lb. Flanged Steel Rails to carry loads up to $3\frac{1}{2}$ tons per axle.

FULL SIZE SECTION OF RAIL & SLEEPER.

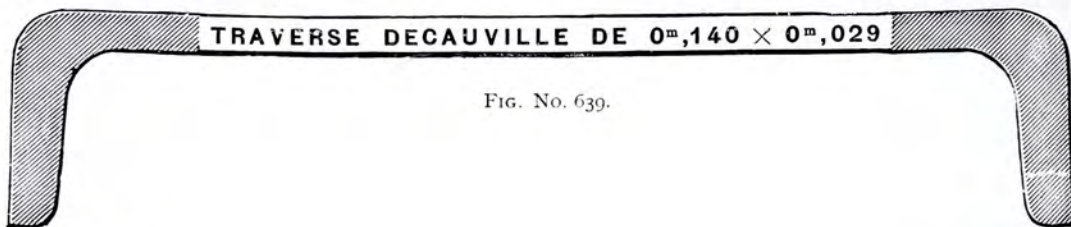


FIG. No. 639.

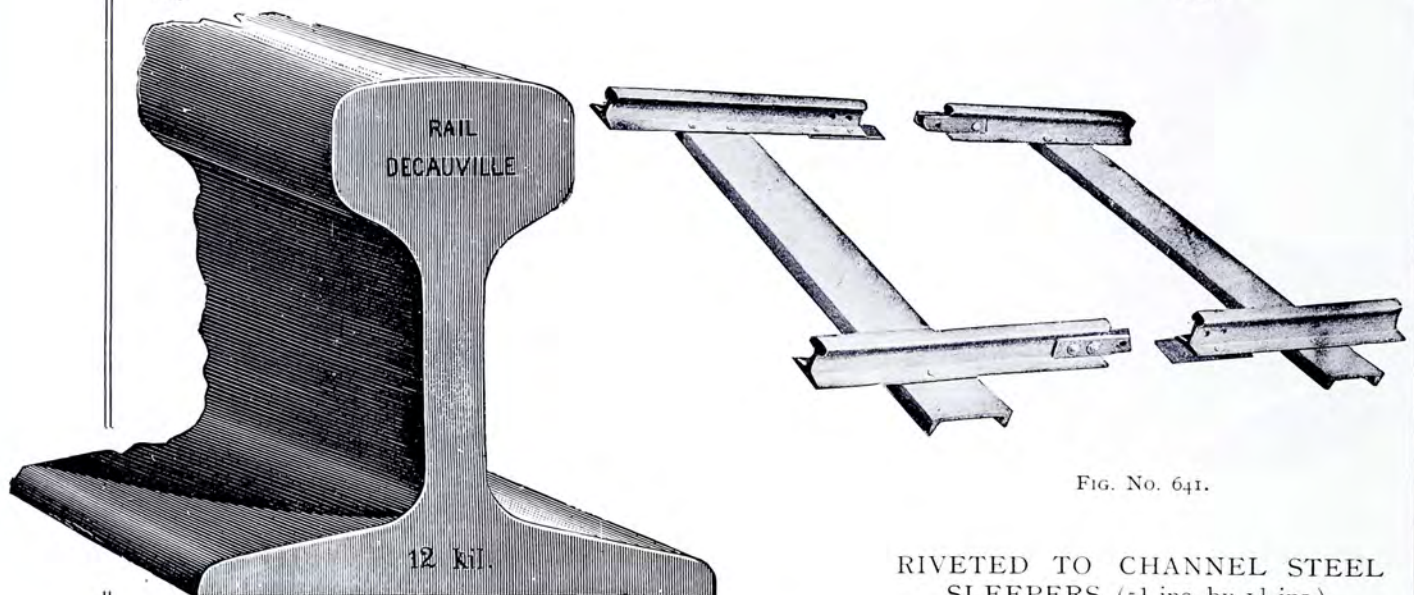


FIG. No. 641.

FIG. No. 640.

THE Rail is riveted to SEVEN strong steel CHANNEL sleepers per length of 16 ft. 5 ins. (5 metres). The fish and base plates are bolted and riveted to the rails so as to form a hybrid junction, and allow of the curves being used in either direction.

This Line has already been supplied to Gas Works, Sugar-cane Plantations, and Heavy Earth Works, for use with animal traction and Locomotives.

Particulars of this Line, Crossings, &c., as usually supplied.

Straight Line, in Lengths of 5 metres (16 ft. 5 ins.)	Crossings to right or left, with Inside Movable Switches, 66, 99, or 165 ft. radius.
" " short lengths, $2\frac{1}{2}$ metres (8 ft. $2\frac{1}{2}$ ins.)	Ordinary Crossing. (For Special Crossings, see page 5.)
" " " " $1\frac{1}{4}$ metres (4 ft. $1\frac{1}{4}$ ins.)	Turntable, with wheel-rutted Turnplate.
Curved Line, in lengths of $2\frac{1}{2}$ metres (8 ft. $2\frac{1}{2}$ ins.)	(For Special Turntables, see page 29.)
" " " " $1\frac{1}{4}$ metres (4 ft. $1\frac{1}{4}$ ins.)	

Fish Plate Bolts included in all Estimates. The Rails and Sleepers are supplied painted with Red Lead.

Gauge of Line measured between the rails. Radius of Curves measured from inner rail. Length of Curves measured from outer rail.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Line No. 13.

24 lb. Flanged Steel Rails to carry loads up to $3\frac{1}{2}$ tons per axle.

FULL SIZE SECTION.



FIG. No. 642.

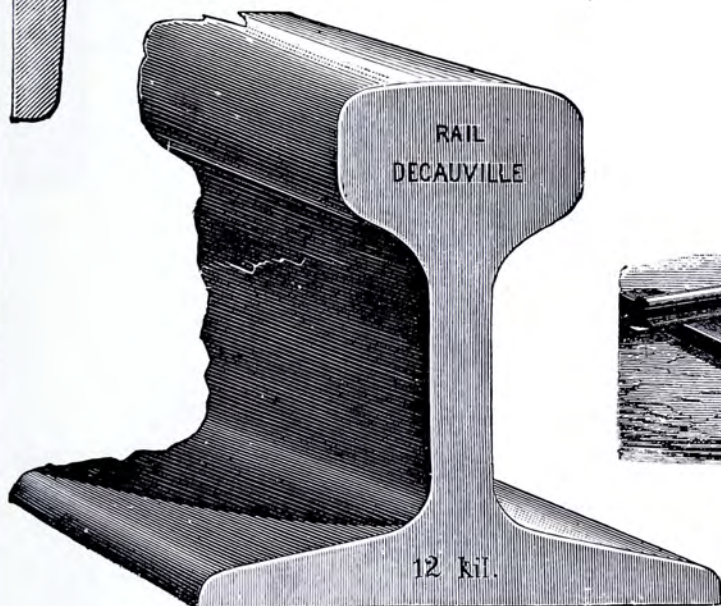


FIG. No. 643.

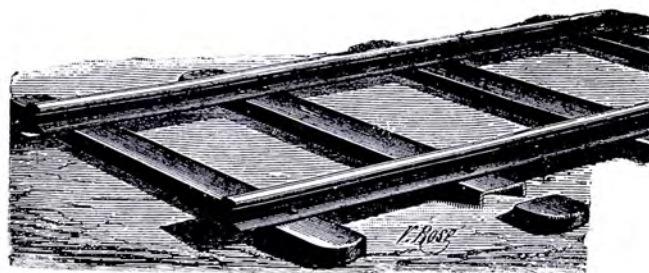


FIG. No. 644.

RIVETED TO CHANNEL STEEL SLEEPERS with closed ends ($5\frac{1}{2}$ in. by $1\frac{1}{8}$ in.)

THE rail is riveted to SEVEN strong steel CHANNEL sleepers per length of 16 ft. 5 in. (5 metres).

The sleepers have their ends closed by a special process, the advantages being that they retain a firm grip of the ballast or soil, and offer great resistance to lateral displacement on curves, especially when used for locomotive traction.

This line is specially recommended for use on soft or sandy soil and for LOCOMOTIVE TRACTION.

Line No. 13^{BIS}.

24 lb. Flanged Steel Rails to carry loads up to 4 tons per axle.

This line is same as above, but has EIGHT sleepers per length, and will therefore carry a greater load.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Line No. 14.

24 lb. Flanged Steel Rails to carry loads up to $3\frac{1}{2}$ tons per axle.

ANGLE STEEL FISH PLATES, FULL SIZE SECTION.

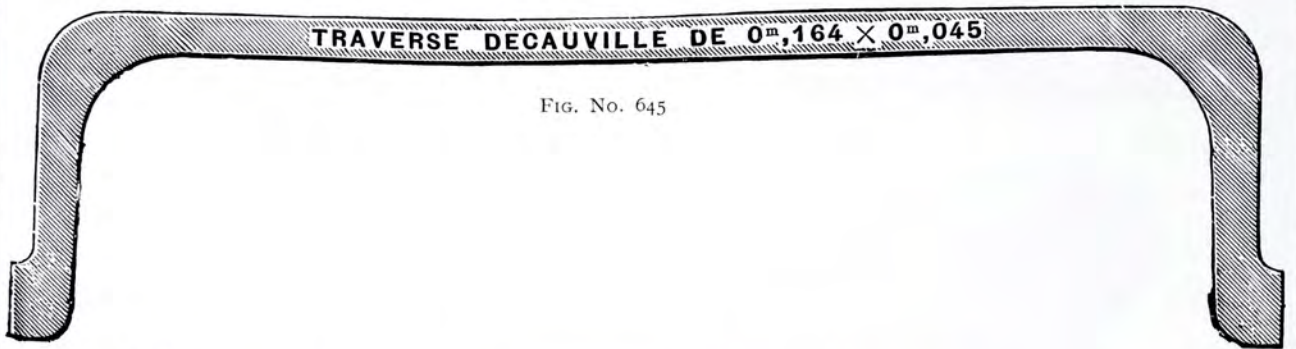


FIG. No. 645

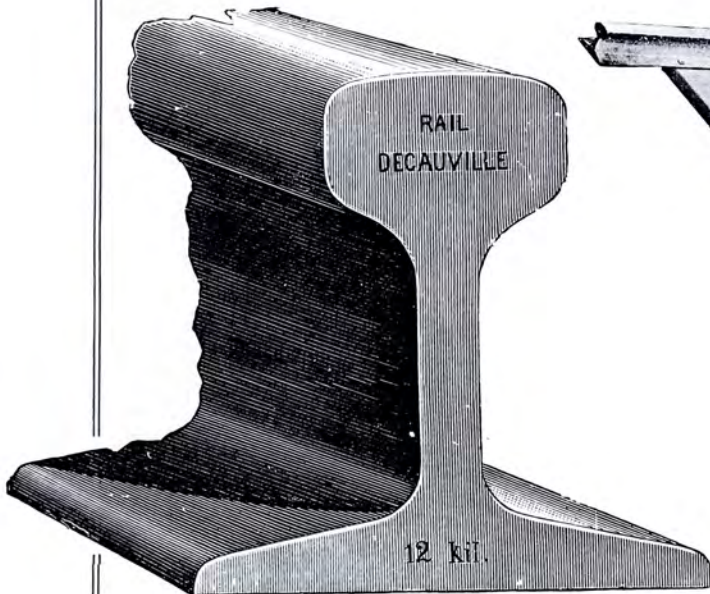


FIG. No. 646.

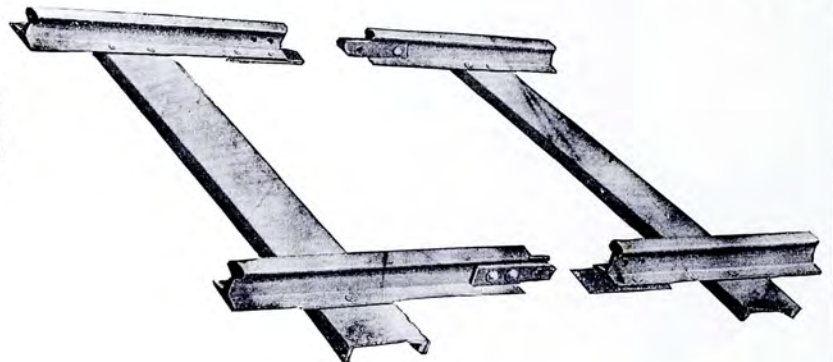


FIG. No. 647.

RIVETED TO STEEL CHANNEL SLEEPERS ($6\frac{1}{2}$ in. by $1\frac{3}{4}$ in., extending on each side).

THE Rail is machine riveted or bolted to SIX strong steel CHANNEL Sleepers per length of 16 ft. 5 in. (5 metres). The base plates are also riveted to the rails so as to form a hybrid junction, and allow of the curves being used in either direction.

This line is recommended as a PERMANENT LINE.

Line No. 14^{BIS}.

24 lb. Flanged Steel Rails to carry loads up to 4 tons per axle.

This is the same as the above (Line No. 14), but has SEVEN sleepers per length, and will therefore carry a much greater load.

"DECAUVILLE" Portable and Narrow Gauge Railway.

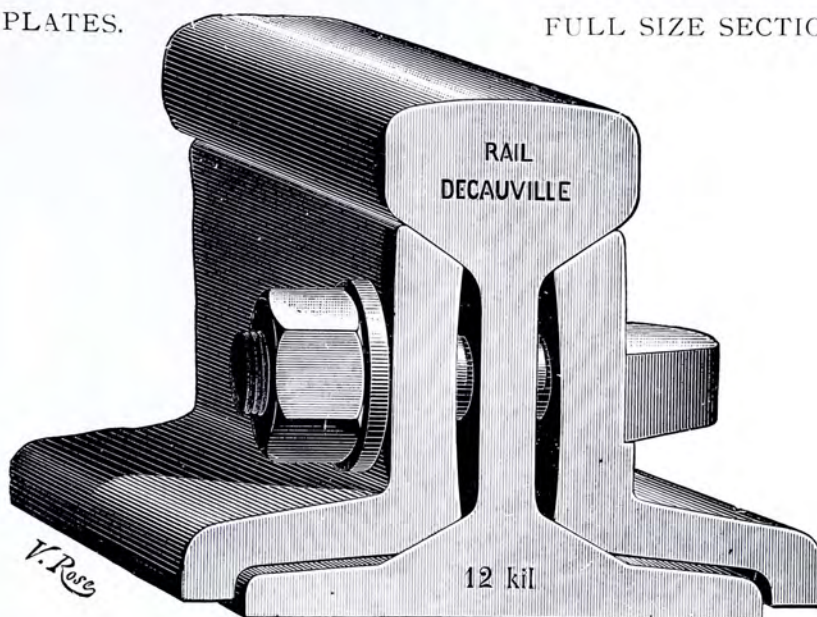
Line No. 15.

24 lb. Flanged Steel Rails to carry loads up to $3\frac{1}{2}$ tons per axle.

ANGLE STEEL FISH PLATES.

FULL SIZE SECTION.

FIG. No. 648.



TRAVERSE DECAUVILLE DE 0^m,164 X 0^m,045

FIG. No. 649.

RIVETED TO STEEL CHANNEL SLEEPERS ($6\frac{1}{2}$ in. by $1\frac{3}{4}$ in. extending on each side) with closed ends.

THE rail is machine riveted or bolted to SIX strong steel CHANNEL sleepers per length of 16 ft. 5 in. (5 metres). The base plates are also riveted to the rails so as to form a hybrid junction, and allow of the curves being used in either direction.

The sleepers have their ends closed by a special process, the advantages being that they retain a firm grip of the ballast or soil and offer great resistance to lateral displacement on curves, especially when used for LOCOMOTIVE TRACTION.

This line is recommended as a PERMANENT LINE and for use on soft or sandy soil.

Line No. 15^{BIS}.

24 lb. Flanged Steel Rails to carry loads up to 4 tons per axle.

This is the same as the above (Line No. 15), but has SEVEN sleepers per length, and will therefore carry a much greater load.

Line No. 15^{TER}.

24 lb. Flanged Steel Rails to carry loads up to 5 tons per axle.

This is the same as the above, but has EIGHT sleepers per length, and will therefore carry a much greater load.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Line No. 16.

30 lb. Flanged Steel Rails to carry loads up to $3\frac{1}{2}$ tons per axle.

ANGLE STEEL FISH PLATES.

FULL SIZE SECTION.

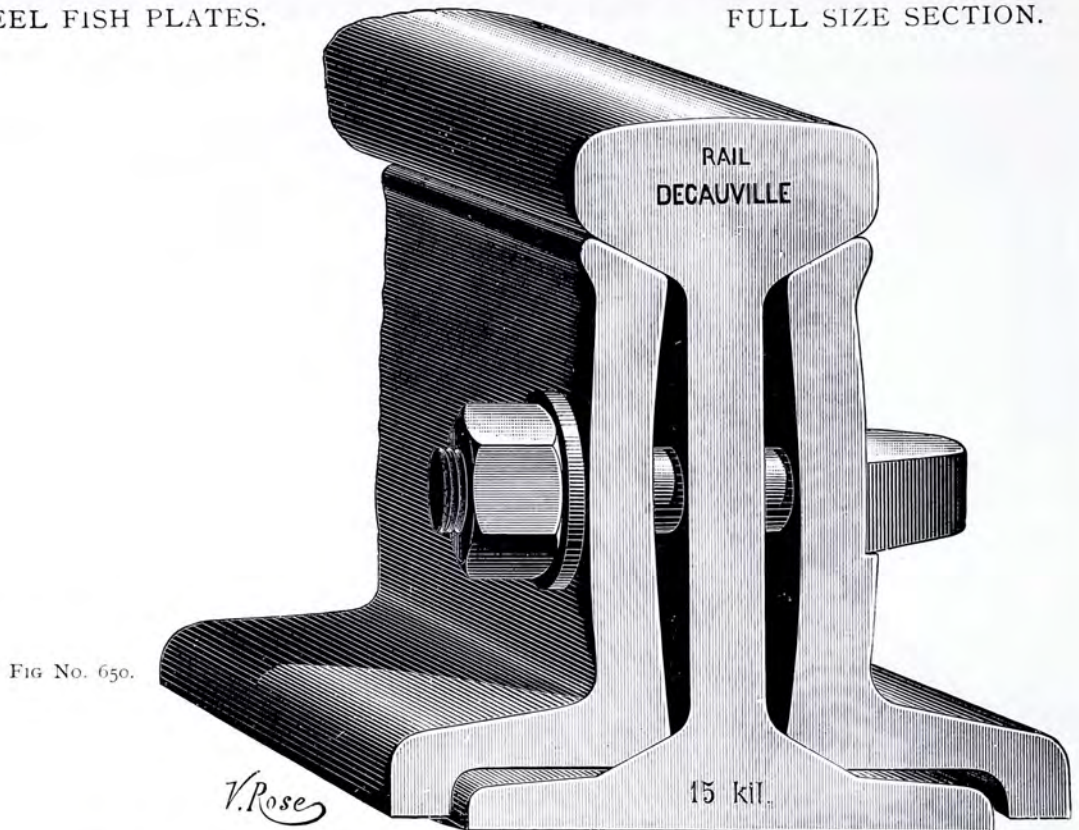


FIG No. 650.

TRAVERSE DECAUVILLE DE 0^m,164 X 0^m,045

FIG. No. 651.

RIVETED TO STEEL CHANNEL SLEEPERS ($6\frac{1}{2}$ in. by $1\frac{3}{4}$ in.)

THE Rail is machine riveted or bolted to FIVE strong steel CHANNEL sleepers per length of 16 ft. 5 in. (5 metres). The base plates are also riveted to the rails so as to form a hybrid junction, and allow of the curves being used in either direction.

NOTE.—This line is specially designed for laying in Roadways, because the height of 4 in. between the top of rail and top of sleeper allows of sufficient ballast to prevent damage to the Track.

Line No. 16^{BIS}.

30 lb. Flanged Steel Rails to carry loads up to $4\frac{1}{2}$ tons per axle.

This is the same as the above (Line No. 16), but has SIX sleepers per length, and will therefore carry a much greater load.

Line No. 16^{TER}.

30 lb. Flanged Steel Rails to carry loads up to $5\frac{1}{2}$ tons per axle.

This is the same as above (Line No. 16bis), but has SEVEN sleepers per length, and will therefore carry a much greater load.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Line No. 17.

30 lb. Flanged Steel Rails to carry loads up to $3\frac{1}{2}$ tons per axle.

ANGLE STEEL FISH PLATES.



FIG. No. 652.

TRAVERSE DECAUVILLE DE 0^m,164 X 0^m,045

FIG. No. 653.

RIVETED TO STEEL CHANNEL SLEEPERS (6½ in. by 1¾ in.)
extending on each side with closed ends.

THE Rail is machine riveted or bolted to FIVE steel CHANNEL sleepers per length of 16 ft. 5 in. (5 metres). The base plates are also riveted to the rails so as to form a hybrid junction, and allow of the curves being used in either direction.

The sleepers have their ends closed by a special process, the advantages being that they retain a firm grip of the ballast or soil and offer great resistance to lateral displacement on curves, especially when used for locomotive traction.

This line is recommended as a PERMANENT LINE, & for use on soft & sandy soil.

Line No. 17^{BIS}.

30 lb. Flanged Steel Rails to carry loads up to $4\frac{1}{2}$ tons per axle.

This is the same as above (Line No. 17), but has SIX sleepers per length and will therefore carry a much greater load.

Line No. 17^{TER}.

30 lb. Flanged Steel Rails to carry loads up to $5\frac{1}{2}$ tons per axle.

This is the same as the above (Line No. 17bis), but has SEVEN sleepers per length, and will therefore carry a much greater load.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Approximate Table of Loads per Axle

Carried by the Decauville System of Steel Line riveted to steel DISHED and CHANNEL sleepers.

In lengths of **16 feet 5 inches.**

Line No. 0.

PER AXLE.

6 lbs. per yard, with 4 dished sleepers, $2\frac{3}{4}$ ins. wide **4 to 5 cwt.**

Line No. 1.

10 lbs. per yard, with 5 dished sleepers, $3\frac{9}{16}$ ins. wide **6 to 10 cwt.**

Line No. 3.

10 lbs. per yard, with 6 dished sleepers, $3\frac{9}{16}$ ins. wide **10 to 14 cwt.**

Line No. 4.

10 lbs. per yard, with 6 channel sleepers, $3\frac{7}{16}$ ins. wide, extending on each side **12 to 16 cwt.**

Line No. 4bis.

13 lbs. per yard, with 6 dished sleepers, $3\frac{3}{4}$ ins. wide **16 to 20 cwt.**

Line No. 4ter.

13 lbs. per yard, with 6 channel sleepers, $4\frac{1}{8}$ ins. wide, extending on each side **30 to 32 cwt.**

Line No. 5.

15 lbs. per yard, with 6 dished sleepers, $3\frac{3}{4}$ ins. wide **20 to 24 cwt.**

Line No. 6.

15 lbs. per yard, with 6 channel sleepers, $4\frac{1}{8}$ ins. wide, extending on each side **30 to 50 cwt.**

Line No. 7.

20 lbs. per yard, with 6 channel sleepers, $4\frac{1}{16}$ ins. wide, extending on each side **40 to 60 cwt.**

"DECAUVILLE" Portable and Narrow Gauge Railway.

TRAMWAY RAIL A. & B.

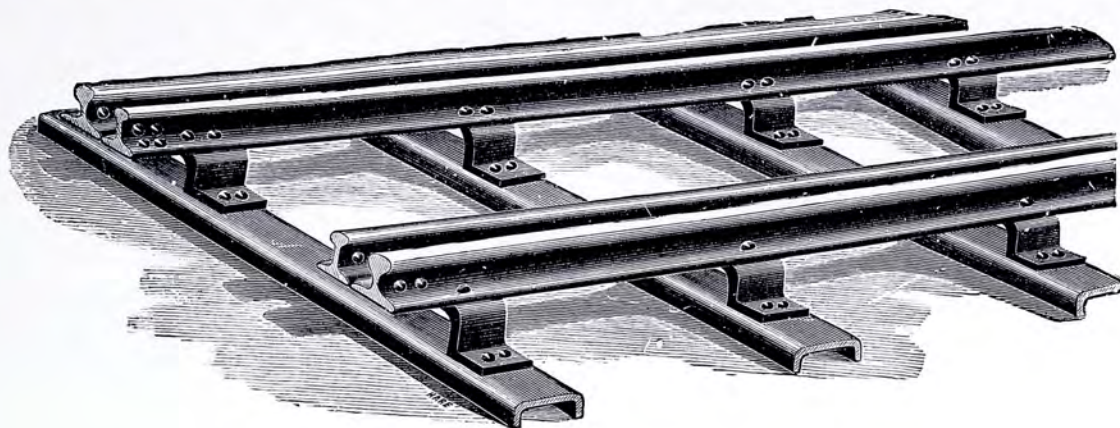


FIG. No. 654.

TRAMWAY RAIL TYPE A. (Rails of 10 lbs., 13 lbs., 15 lbs. and 20 lbs.)

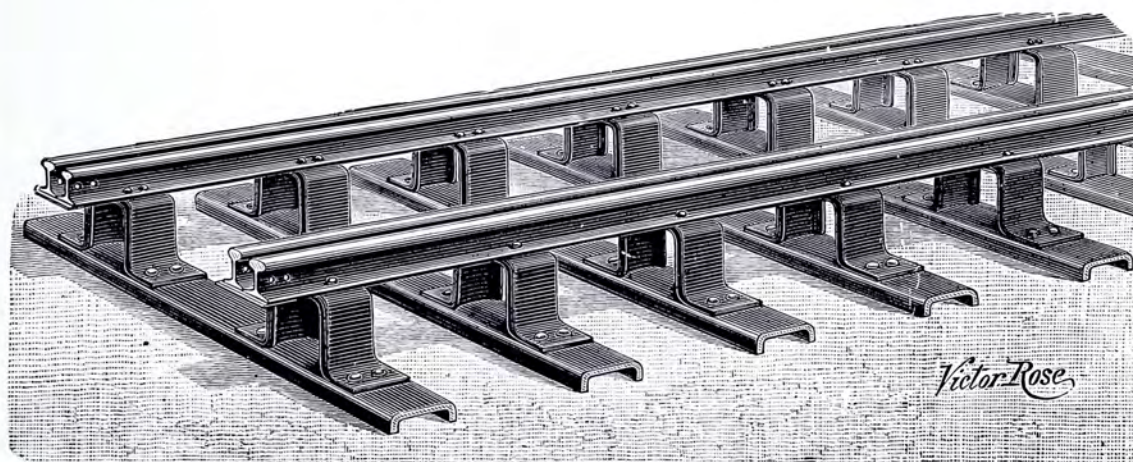


FIG. No. 655.

TRAMWAY RAIL TYPE B. (Rails of 20 lbs.)

THIS Track, which is very rigid, allows granite setts or macadam to be so laid on top of the sleepers as to form a level roadway for horse and Wagon traffic.

Type A. For lines with rails of **10 lbs., 13 lbs., and 15 lbs.,** we have only one type of low supports, made of flat steel, which provides for setts 4 in. to $4\frac{3}{4}$ in. (10 to 12 c/m) high, or a corresponding bed of Macadam, as these lines are generally used in places where only light loads are required.

For Line with **20 lb.** rails we have flat high steel supports, one type for Macadam roads, and two types for granite setts.

The space between the carrying rail and the guard rail is made according to the local tramway regulations, which should be specified when ordering.

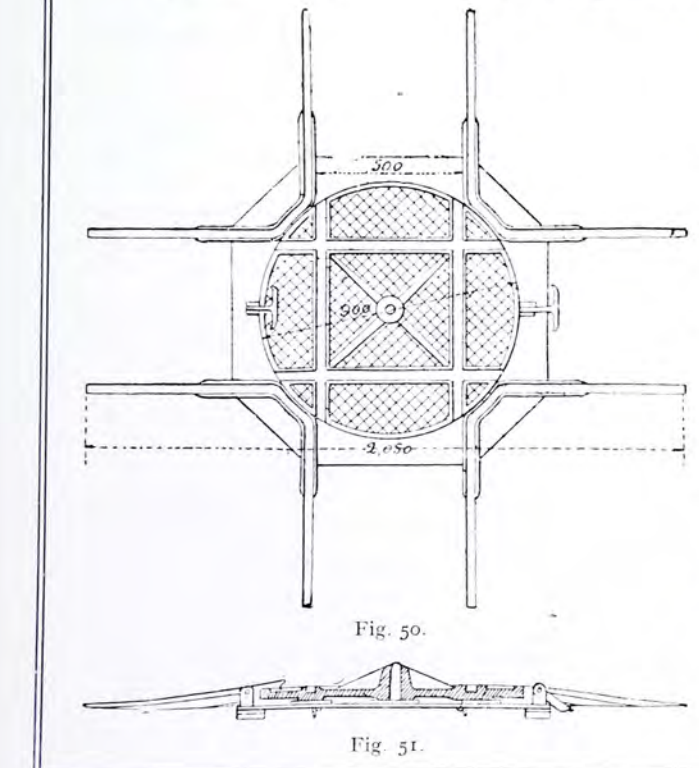
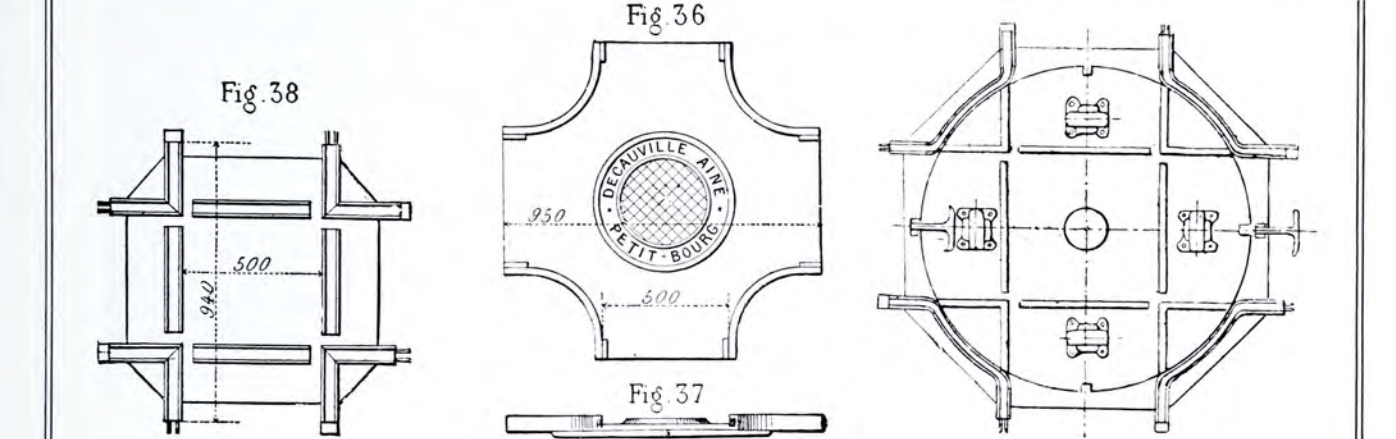
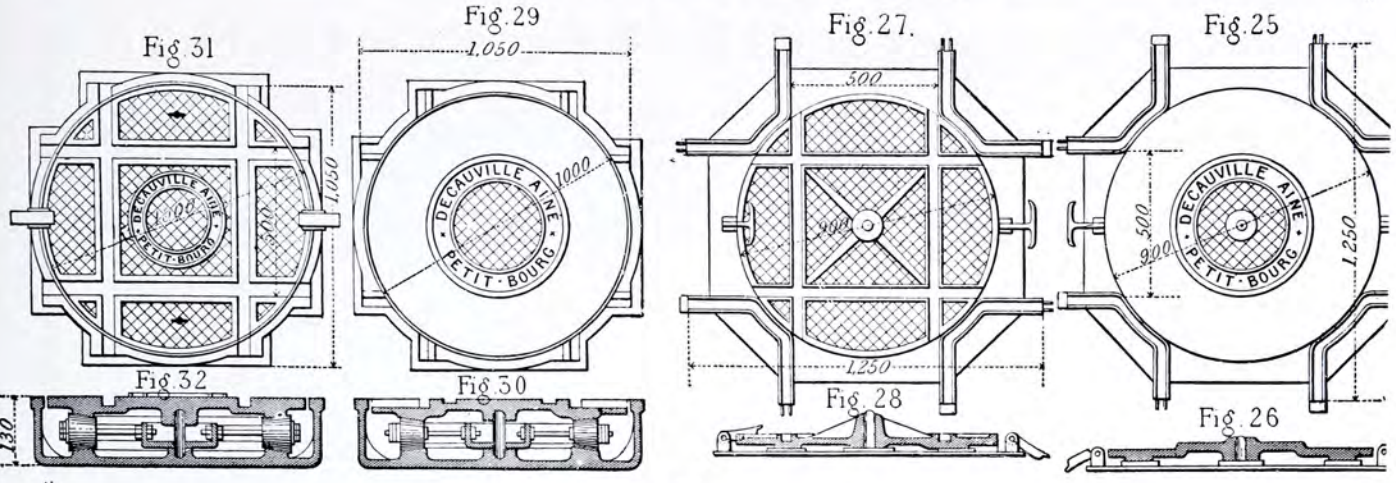
Guard Lines. With rails of 10 lbs., 13 lbs., and 15 lbs., we have guard rails of the same weight, but with rails of 20 lbs. we have lighter guard rails, although of the same height.

Dimensions of Turntables.

"DECAUVILLE" Portable and Narrow Gauge Railway.

DESCRIPTION.	Diam. inches.	For Gauges of Inches.				For Rails of lbs.			
		16	20	24	30	6	10	12	15
Portable Turntable with smooth Top (Fig. 25)	27½	...	...	...	...	6	10	12	15
" " " " " "	31½	16	20	...	...	6	10	12	15
" " " " " "	35½	16	20	...	...	6	10	12	15
" " " " " "	39½	16	20	24	...	6	10	12	15
" " " " " "	47	...	...	24	...	6	10	12	15
Portable Turntable with wheel-rutted Top (Fig. 27)	27½	16	20	...	...	6	10	12	15
" " " " " "	31½	16	20	...	...	6	10	12	15
" " " " " "	35½	16	20	...	...	6	10	12	15
" " " " " "	39½	16	20	24	...	6	10	12	15
" " " " " "	47	...	...	24	...	6	10	12	15
" " " " " "	55	...	...	24	...	6	10	12	15
Self-contained Turntable with cast-iron casing and smooth turn-plate (Fig. 29) ...	27½	16	...	...	...	6	10	...	...
Do. do. do. do.	31½	16	...	...	...	6	10	...	...
Do. do. do. do.	39½	...	20	...	...	6	10	...	...
Do. do. do. do.	47	...	...	24	...	...	...	...	20
Self-contained Turntable with cast-iron casing and wheel-rutted Top (light type) (Fig. 31) ...	27½	16	...	...	...	6	10	...	...
Do. do. do. do. (heavy type)	27½	16	...	...	...	6	10	12	15
Do. do. do. do. (heavy type)	31½	16	...	...	...	6	10	12	15
Do. do. do. do. (heavy type)	33½	...	20	...	...	6	10	12	15
Do. do. do. do. (light type)	39½	...	20	24	...	...	...	12	15
Do. do. do. do. (heavy type)	39½	16	...	...	...	6	10	12	15
Do. do. do. do. (light type)	47	...	...	24	...	...	10	12	15
Do. do. do. do. (heavy type)	47	...	...	24	...	...	...	12	15
Skid Plate of cast-iron (Fig. 36) ...	...	16	20	24	...	6	10	...	...
Couvreur System Turntable for loads up to 2½ tons ...	55	...	...	24	30	...	...	...	...
Self-contained Turntable for Locomotives of 2½ and 3 tons ...	59	...	20	24	...	...	...	12	15
Portable Table for 9 ton Wagons ...	51	...	...	24	...	...	...	...	...
Self-contained Turntable for Locomotives of 4 to 6 tons ...	78½	...	...	24	...	...	...	...	...
" " " " " "	88	...	...	...	30	...	...	...	...
" " " " " "	98½	...	...	24	...	...	...	...	20

TURNTABLES.



- Fig. 25. Portable smooth-top Turntable (top plate cast-iron, lower plate steel). Diameter 2 ft. 11 $\frac{3}{8}$ ins. (0^m, 900).
- Fig. 26. Section of ditto.
- Fig. 27. Portable wheel-rutted Turntable (upper plate cast-iron, lower plate steel). Diameter 2 ft. 11 $\frac{3}{8}$ ins. (0^m, 900).
- Fig. 28. Section of ditto.
- Fig. 29. Smooth-top Turntable with cast-iron casing. Diameter 3 ft. 3 $\frac{3}{8}$ ins. (1^m, 000).
- Fig. 30. Section of ditto.
- Fig. 31. Wheel-rutted Turntable with cast-iron casing. Diameter 3 ft. 3 $\frac{3}{8}$ ins. (1^m, 000), light pattern.
- Fig. 32. Section of ditto.
- Fig. 36. Skid plate (for wet work), entirely of cast-iron.
- Fig. 37. Section of ditto.
- Fig. 38. Right-angled intersection. Special intersections are of the same construction, except for large sizes, which are constructed with sleepers.
- Fig. 50. Plan of Portable Turntable with off-railer entries, allowing an auxiliary Track to be fixed at any point on an existing Track without disconnection.
- Fig. 51. Section of ditto.
- Fig. 52. Plan of Turntable with top plate mounted upon small wheels, without casing. This is constructed for any diameter or load according to requirements. The small wheels can be placed right under the top plate if specially ordered.
- Fig. 53. Section of ditto.

NOTE.—We also make portable Turntables with ball bearings for any diameter or gauge.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Decauville Wagons.

One of the most essential features of the Decauville Tipping Wagon is the Equilibrium system by which the body can be emptied either side or end without any locking or unlocking of bolts or catches, and immediately restored to its upright position, ready for refilling by its own automatic action, and with an absolute minimum of effort on the part of the man or boy in charge. Another essential feature is the remarkably strong and practically indestructible square under-frame to which the stanchions are fixed; by removing the wagon body and unfixing the stanchions, the under frame becomes a solid platform wagon, adaptable to any kind of transport.

The extremely durable construction of the whole and every part of the **standard patterns** of the Decauville Wagon being sometimes objected to where trucks are only required for one or two contractors jobs, and consequently a very low priced article is demanded, has led our Works to manufacture a lighter and cheaper truck in **three** sizes, called the "Tower-Wagon," retaining the equilibrium system and square under-frame, but of lighter and less durable construction,



FIG. No. 656. Equilibrium Tip-Wagon.

and at prices considerably lower than the usual standard patterns. In addition to the above the Decauville Company also supply a special Cradle Wagon for the Colonial trade, in which the load being above the centre of gravity, the body is held in position by a simple form of catch, which prevents the tipping of the body until this is released, when the body tips either side as may be directed by the man in charge.

Either wagons when shipped in quantities can be "nested" so as to effect the greatest possible saving in freight. In the case of the standard Equilibrium

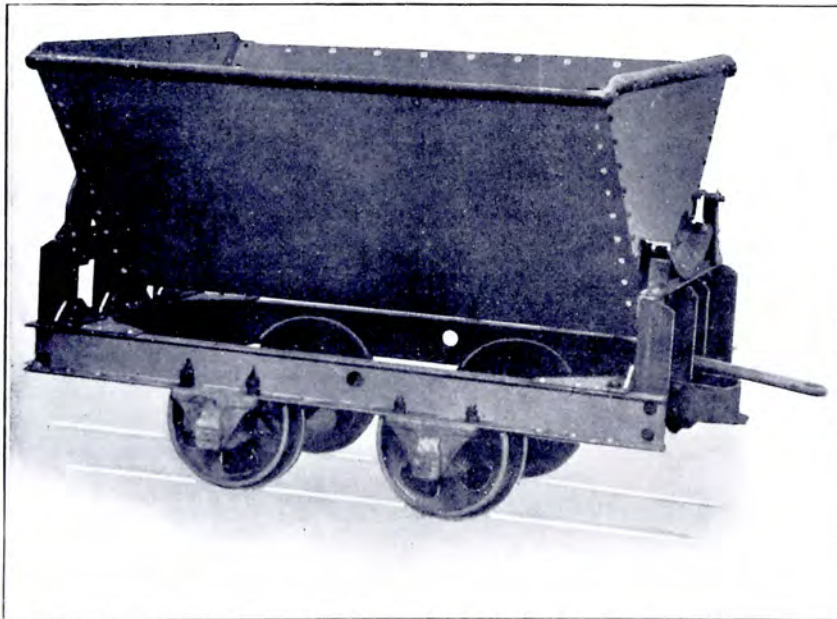


FIG. No. 657. Cradle Tip-Wagon.

"DECAUVILLE" Portable and Narrow Gauge Railway.

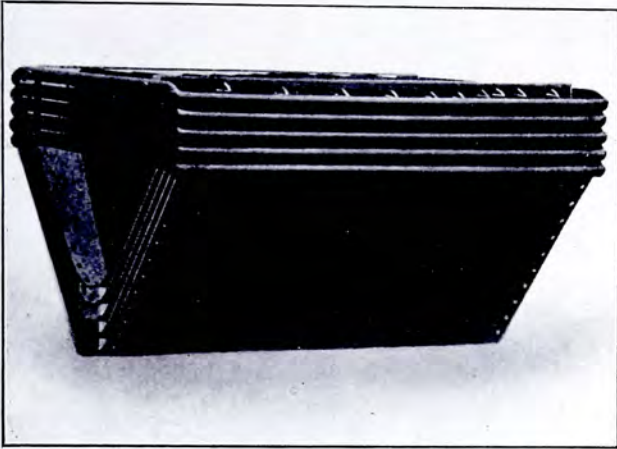


FIG. No. 658.

Wagons, wheels and axles are fixed inside the body of each wagon, and the bodies may be stowed in the ship's hold.

Briefly, it may be stated, that at the Decauville Works every possible variety and description of wagon or truck is, or can be, constructed to suit the requirements of customers whenever clearly stated, but in most cases it will be found that owing to the very great and long experience collected in these works, a suitable design can always be offered for every possible requirement, and such as meet the desired purpose in the most practical and efficient manner.

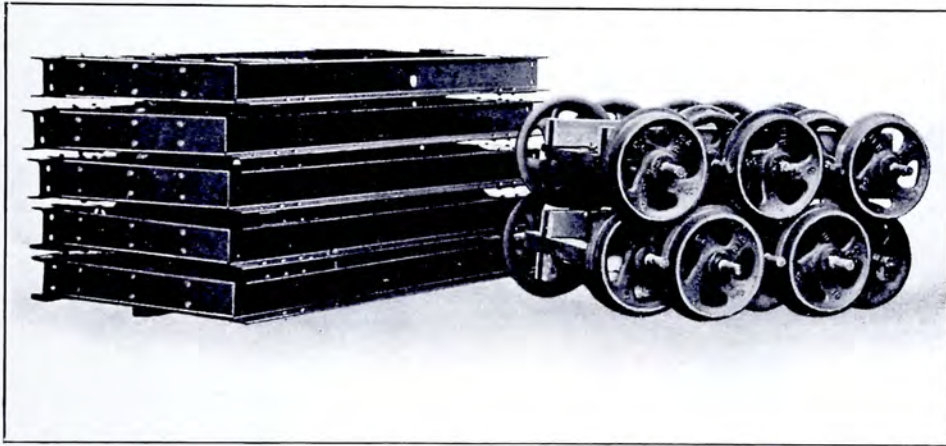
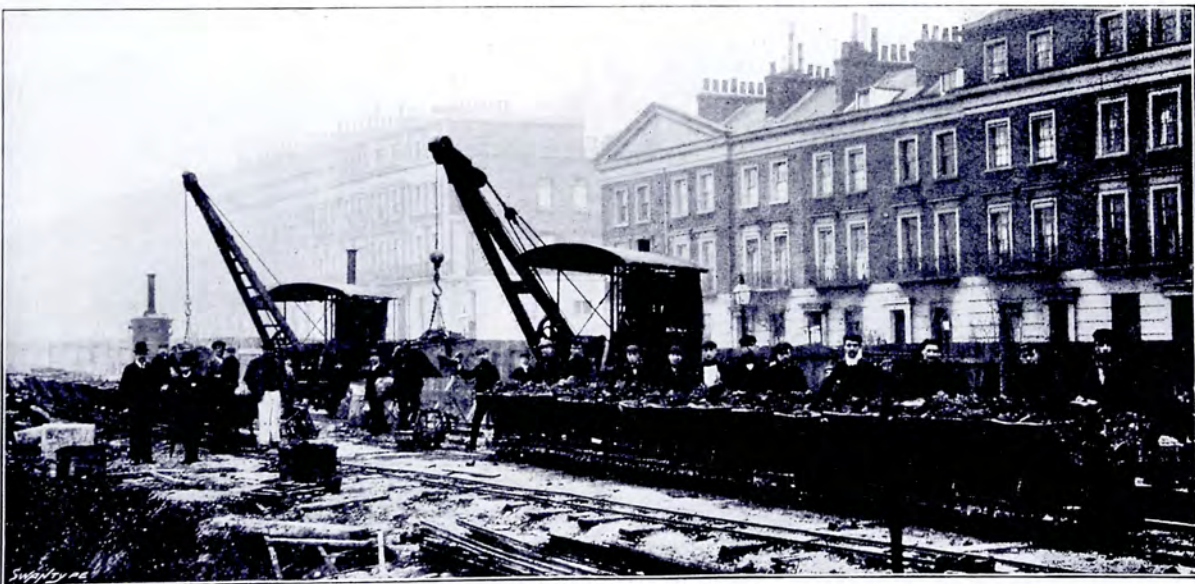


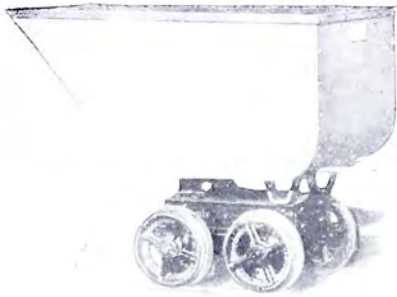
FIG. No. 659.

Fig. 658 and Fig. 659 shew how the Tip - Wagons can be nested for shipment.

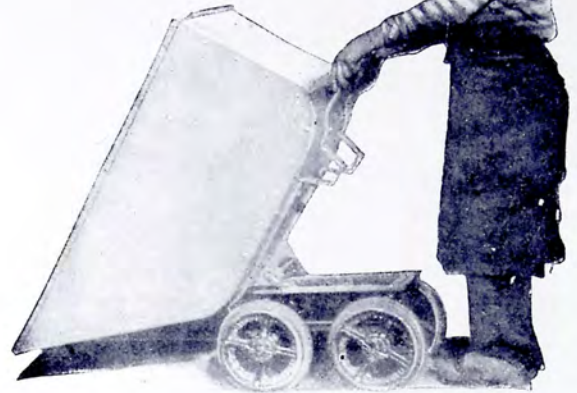


"Decauville" Track and Wagons, London North Western Railway Extension, Camden Town, London.

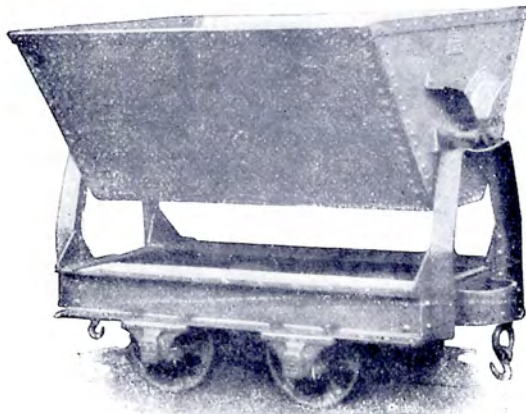
Sundry "Decauville" Tipping Wagons.



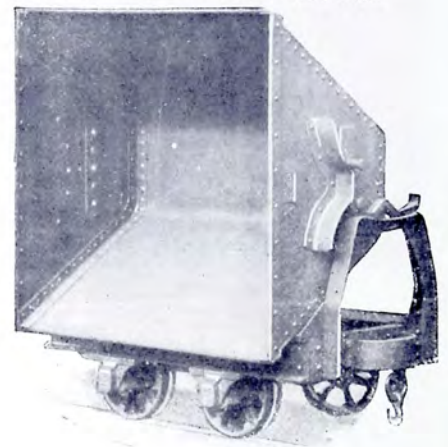
Tip-Wagons for Foundries, etc.



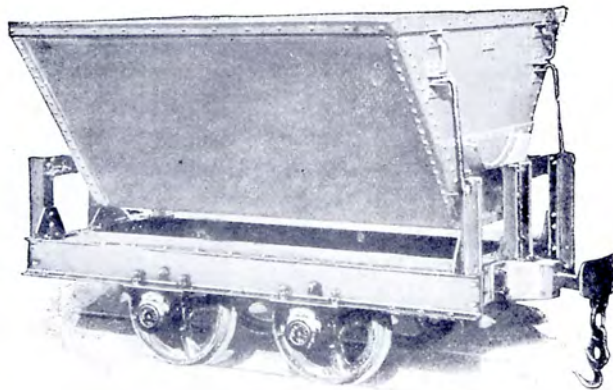
Can also be made for all-round tipping.



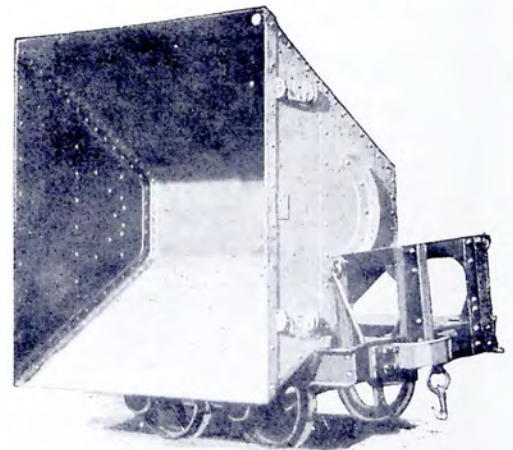
Side Tip Wagon, Type 25 C.
18 cubic feet capacity, extra heavy construction.



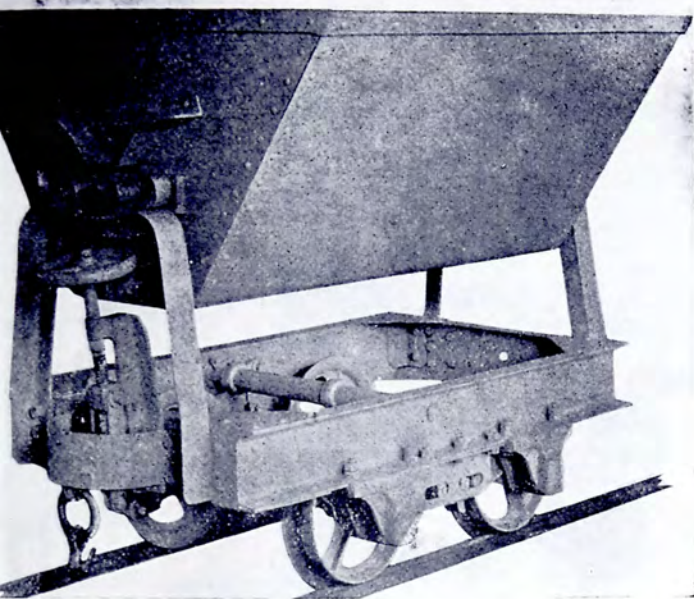
Type 25 C Tipped.
The body advances in tipping and contents are delivered clear of the rails.



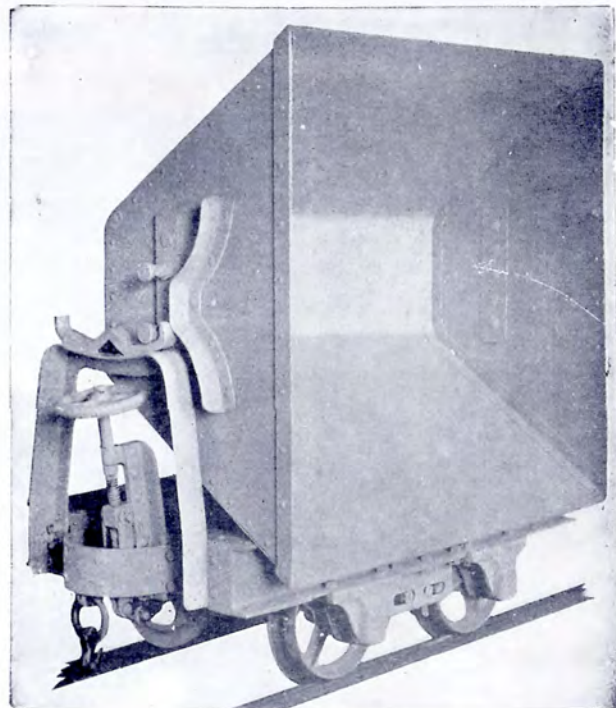
Type 26 C—Cradle Tipping, with safety catch.



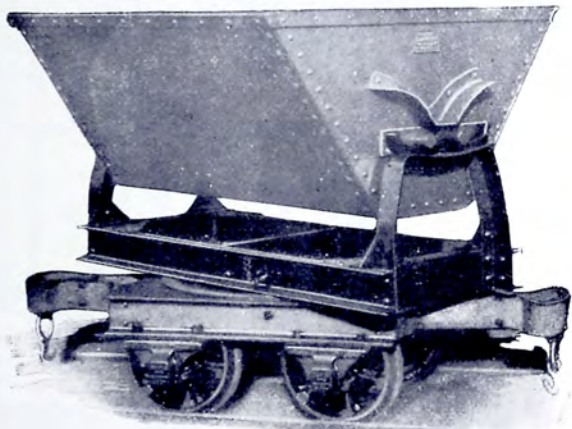
The same Wagon shown tipped clear of the rails.



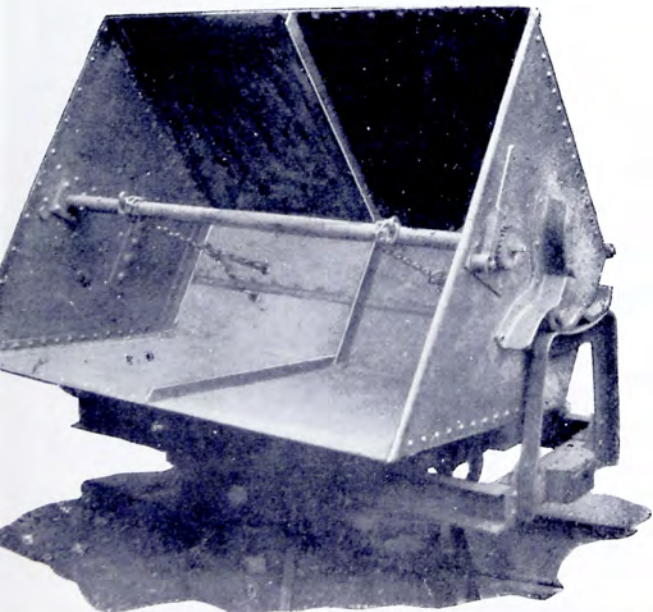
Equilibrium Side Tipping Wagon with Buffers and Screw Brake.



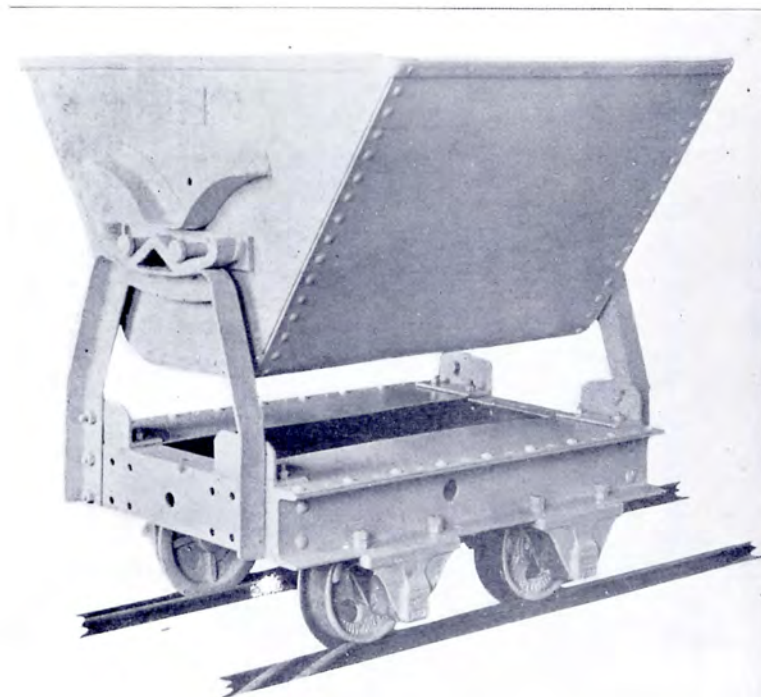
Same Wagon Tipped.



Specially Strong All-round Tip Wagon.

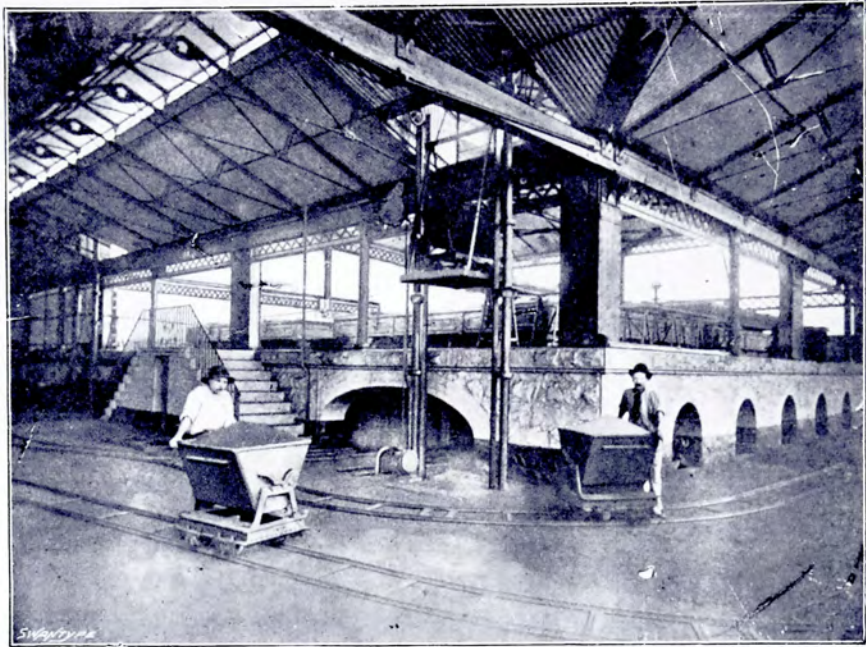


Special Gas Works Wagon fitted with flap doors at bottom.

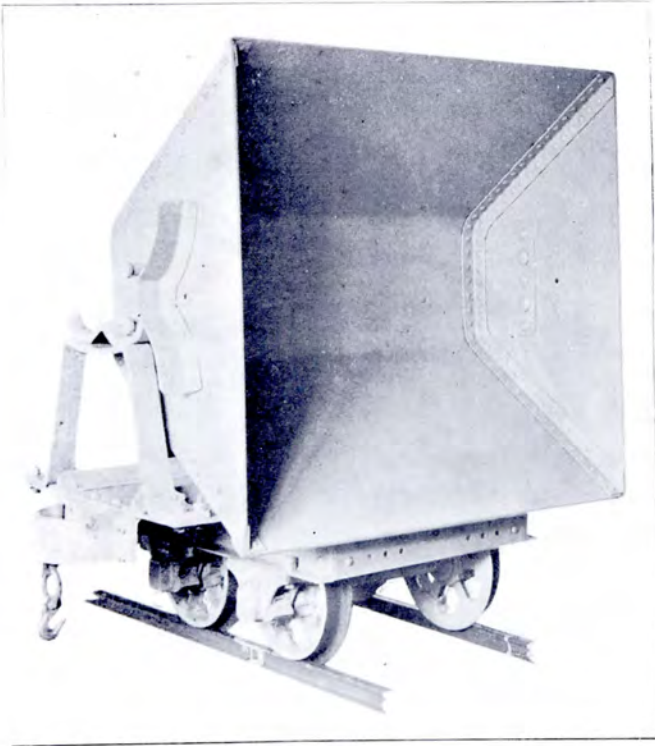


Equilibrium Side Tipping Wagon without Buffers or brake.

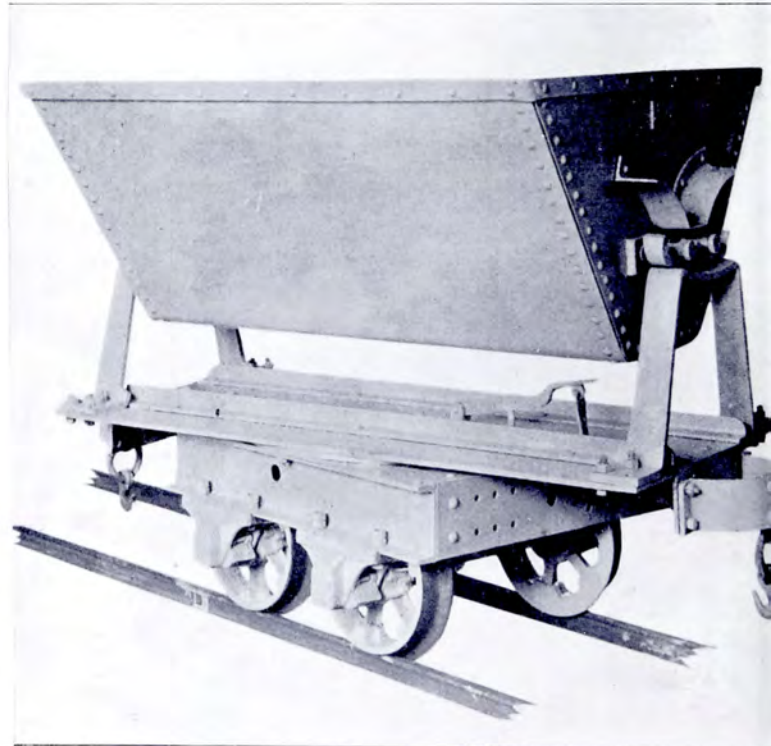
Sundry Decauville Tipping Wagons (contd.)



Installation at Metropolitan Gas Co. of Melbourne, showing the "Decauville" Track and Tip-Wagons being used in conjunction with an Hydraulic Lift raising the trucks.



Equilibrium End-Tip Wagon.



Equilibrium All-Round Tip Wagon.

"DECAUVILLE" Portable and Narrow Gauge Railway.

WAGONS.

The design and construction of the various types of Wagons for the transport of any kind of material has been carefully considered, with the result that numerous types have been adopted as Standard patterns, to which we have given distinguishing numbers to facilitate reference when specifying for any particular Wagon.

The "Decauville" Works are specially fitted with Plant and Machinery for the construction of **any Wagon not shown in this Catalogue**, and can **alter or modify** the Standard types to suit requirements. Every part is **Standardized and Interchangeable**, and can be replaced.

The Wagons are made to Standard Gauges of 16 in., 18 in., 20 in., 24 in., and 30 in., but **Wagons of any gauge can be constructed** as required. The capacities of Wagons given are in all cases "Level Measure," and the Wagons will carry about 10 per cent. more when heaped.



FIG. No. 660.—TYPE 2.

Type 2—Channel steel frame, mounted on chilled iron wheels 8 inches diameter, Type R 51, steel step bearings, Type B 15, constructed to carry a load up to 6 cwt.

Open steel Cradle, with lifting handles for agricultural purposes.

Cradle constructed of sheet steel.

Pivoting Fork to fit frame.

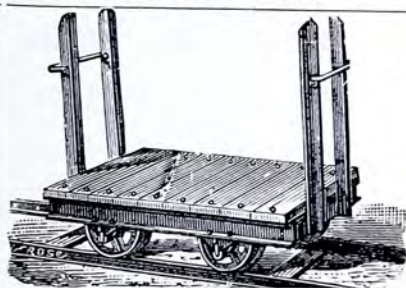


FIG. No. 661.—TYPE 4B.

Type 3 —Channel steel frame, 2 feet long, mounted on wheels $9\frac{1}{2}$ inches diameter, Type R 50, steel step bearings, Type B 15, with pivoting fork for carrying "bar iron."

„ **4B**—Steel platform 2 feet long, with pushing bars at both ends, for use in manufactories, mounted on chilled iron wheels 8 inches diameter, Type R 51, steel step bearings, Type B 15.

„ **4C**—The same, 2 feet $7\frac{1}{2}$ inches long.

„ **4D**— „ 3 feet 3 inches long.

„ **4E**— „ 4 feet long.

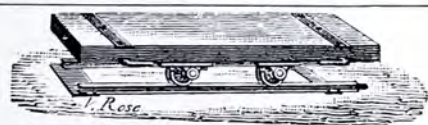


FIG. No. 662.—TYPE 5.

Type 5 —Wood Platform Wagon 4 feet 4 inches long, mounted on solid wheels $4\frac{3}{4}$ inches diameter, to carry up to 2 tons on two axles.

„ **5B**—The same to carry up to 3 tons on 3 axles.

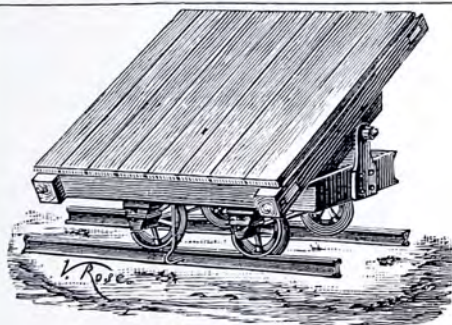


FIG. No. 663.—TYPE 6.

Type 6 —Wooden Platform Tipping Wagon (3 feet 3 inches \times 3 feet 3 inches), to carry loads up to 2 tons, mounted on steel wheels 11 inches diameter, and steel step bearings, Type B 25, without buffers.

„ **6B**—The same, with central buffers.

„ **6C**—The same, with one central spring and one dead buffer.

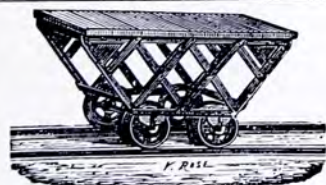


FIG. No. 664.—TYPE 7B.

Type 7B—Wood Platform Wagon, specially constructed for use in iron and tin sheet-plate works, 4 feet 3 inches long \times 2 feet $7\frac{1}{2}$ inches wide and 2 feet high, mounted on wheels 8 inches diameter, Type R 51, and oil axle boxes, Type B 112.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Underframes.



FIG. No. 665.
Types 8 to 10 D.

The Types 8, 9 and 10 are designed as Underframes for the Side, End, and all-round Tip and Platform Wagons, they are in all cases made square, and are constructed of **channel steel strongly riveted** to steel angles, and have longitudinal plates riveted to the upper side. The **square** frame is not only of a very strong construction, but far superior to the bent frames of ordinary cheap wagons, as it keeps the axles square with one another, and so prevents the constant derailments which occur when the axles through the **bending of the frames** no longer remain parallel to one another.

These frames are provided with a series of holes for the bolting on of the various accessories necessary to transform them into types 11, 12, 22, 27, 29, 30, 31 and 33.

- Type 8 A.**—Channel steel Underframe 3 ft. long, mounted on chilled iron wheels 8 in. diameter, Type R 51, and oil axle boxes, Type B 112, without buffers.
- „ **8 C.**—The same as Type 8 A, mounted on wheels 9½ in. diameter, Type R 50.
- „ **9 A.**—Channel steel Underframe 3 ft. 3 in. long, mounted on chilled iron wheels 8 in. diameter, Type R 51, and oil axle boxes, Type B 112, without buffers.
- „ **9 C.**—The same as Type 9 A, but mounted on chilled iron wheels 9½ in. diameter, Type R 50.
- „ **10 A.**—Channel steel Underframe 4 ft. 7 in. long, mounted on chilled iron wheels 12 in. diameter, Type R 18, and oil axle boxes, Type B 109, without buffers.
- „ **10 B.**—The same as Type 10 A, but mounted on wheels 12½ in. diameter, Type R 21, and oil axle boxes, Type B 107.
- „ **10 C.**—Channel steel Underframe 4 ft. long, mounted on chilled iron wheels 12 in. diameter, Type R 18, and oil axle boxes, Type B 109, without buffers.
- „ **10 D.**—The same as Type 10 C, but mounted on chilled iron wheels 12½ in. diameter, Type R 21, and oil axle boxes, Type B 107.

Wagons for Sugar Cane and Agricultural Purposes.

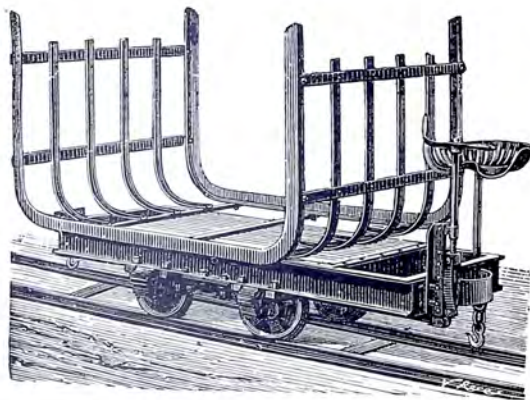


FIG. No. 666.

Type 11 E, fitted with extending frame, seat, and buffers.

- Type 11 A.**—Channel steel underframe, Type 9, with steel plate platform 3 ft. 3 in. long, mounted on wheels 9½ in. diameter, oil axle boxes, B 112, extending buffers, and angle steel cradle 5 ft. between uprights, 3 ft. 3 in. wide, and height of uprights from frame, 2 ft. 9½ in. This Wagon has been supplied to Brazil and other countries where the sugar cane is transported in 4 or 5 ft. lengths.
- „ **11 B.** (Porto-Rico pattern)—The same, with wheels 12 in. diameter, oil axle boxes, Type B 109, with cradle 5 ft. 3 in. long, 4 ft. wide, and 3 ft. 2 in. high.
- Extra for vertical screw brake.
- „ extending frame for screw brake.
- „ seat for brakeman.
- Type 11 C.**—Channel steel underframe, 3 ft. 3 in. long, mounted on chilled iron wheels 12½ in. diameter, oil axle boxes, Type B 107, with cradle 5 ft. 3 in. long, 4 ft. wide and 3 ft. 2 in. high, fitted with extended central buffer. Extra for spring buffer.
- „ **11 D.**—The same as 11 C, but having dead buffer at one end and spring at the other.
- „ **11 E.**—The same as Type 11 C, but fitted with vertical screw brake and seat for brakeman.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Wagons for Sugar Cane and Agricultural Purposes—Continued.

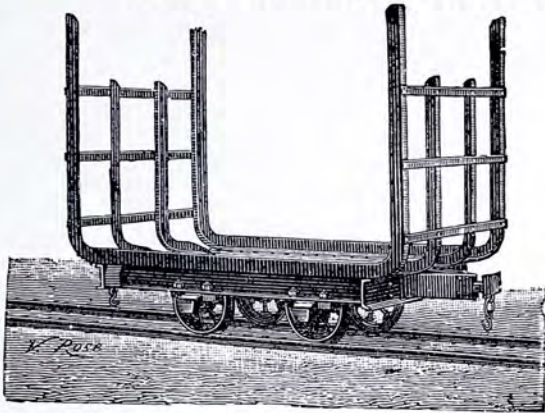


FIG. No. 667. Type 11 K (Australian pattern).

Type 11 P—Special Wagons for Sugar Cane transporting, with plate Top, mounted on cast steel wheels 15 in. in diameter, Type R 125, with oil axle boxes on springs with hard brass renewable bearings, Type B 120, mild steel axles 2 in. in diam. with Journals $1\frac{1}{2}$ in. diam. with spring buffer at one end and extended dead buffer at the other, with strengthened cradle in steel angle 6 ft. 6 in. long, 4 ft. wide, 4 ft. 6 in. high, with ratchet, pawl and drum for a chain to keep the canes in position. Extra for vertical screw brake. Extra for lengthening the wagons for the fixing of the brake. Extra for seat for Brakesman.

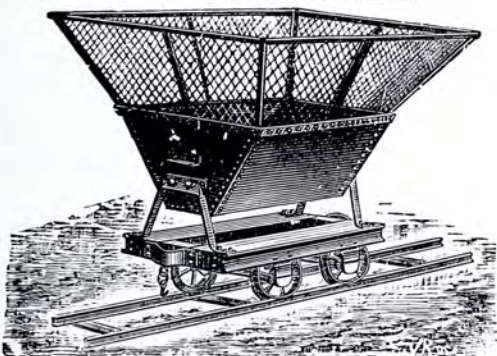


FIG. No. 669. Type 13.

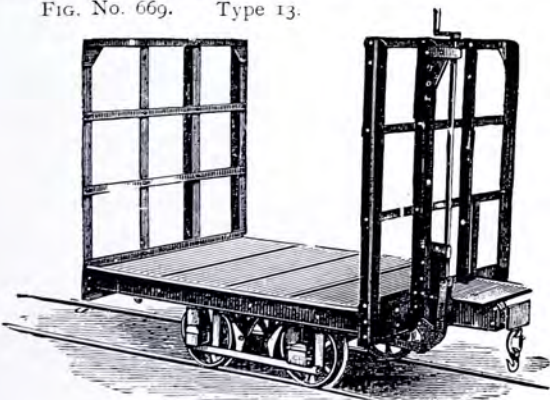


FIG. No. 670. Type 14 B.

Type 11 K—(Kidd pattern) channel steel underframe on chilled iron wheels $12\frac{1}{2}$ in. diam., Type R 21, oil axle boxes, Type B 107, with dead buffer at one end and spring buffer at the other, total length 7 ft. 10 in. with cradle of steel angles 6 ft. 4 in. long, 3 ft. 11 in. wide, and 4 ft. 3 in. high.

„ **11 M**—The same but with extended buffers without springs at both ends for animal traction.

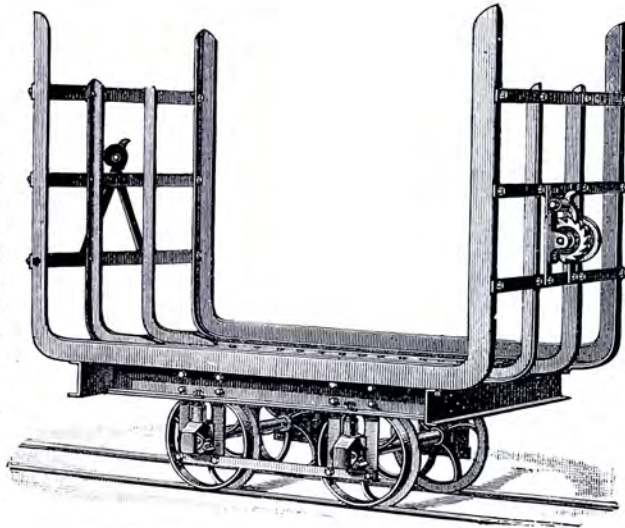


FIG. No. 668. Wagon Type 11 P.

Type 13 —Wagon for sugar refineries, agricultural, and other purposes. Can be used as an ordinary side tipping wagon by removing the cage. Frame 5 ft. 8 in. long, mounted on wheels 12 in. diameter, Type R 18, oil axle boxes, Type B 109, and fitted with double wrought-iron equilibrium tipping box, to hold 90 cubic feet when fitted with wire cage, without buffers.

The same with extending buffers.

Type 14 —Platform Wagon 5 ft. 4 in. long by 4 ft. wide, mounted on chilled iron wheels $12\frac{1}{2}$ in. diameter, Type R 21, oil axle boxes, Type B 123; fitted with spiral steel springs, spring buffers at each end.

„ **14 B** (see Fig. 670)—As above, but fitted with screw brake acting on the four wheels, with platform for Brakesman.

“DECAUVILLE” Portable and Narrow Gauge Railway.

The “Decauville” Double Side, End, and All-Round Equilibrium Tipping Wagons.

The utmost care is taken in the design and manufacture of these Wagons, of which a large variety of Types have been constructed to meet various special requirements and loads. They are light and very durable, and owing to the friction being reduced to a minimum will carry the **heaviest possible** load per wagon in proportion to the power expended in drawing these loads. **Great strength and rigidity** is afforded by the channel steel frames.

All these Types, being constructed entirely of **metal**, are suitable for every class of transport work, with capacities varying from **5½ to 58 cubic feet** per wagon.

Special attention is drawn to **Types 25 B and 25 F**, a new **steel** wagon of 18 cubic feet capacity, for use on Lines Nos. 5 and 6.

As the very best **material** and **workmanship** is employed in the construction of these Wagons, the deadweight to be drawn is reduced to a minimum, thus effecting a large saving in the cost of transport. The tipping box is constructed of steel, $\frac{1}{8}$ in. thick at the ends and $\frac{3}{16}$ in. for the sides and bottom; the standards are of angle steel, $2\frac{3}{4}$ by 2 ins., bolted to the ends of the steel frame. The angle of the box, when fully tipped, is so arranged that wet small coal or clay will clear. The steel wheels are $12\frac{1}{2}$ ins. and 12 ins. in diameter respectively, and the oil axle boxes are of new and extra strong pattern. The aperture in these axle boxes for replenishing the oil is situated at the side, between the strengthening cheeks of the axle box, and is closed by a cover with a spring on the back to keep it shut.

The lubricant is retained in the box by means of a fibre washer, which keeps the journal well lubricated, and may be renewed as occasion requires. Special care is taken to render the axle box **dust-proof**.

The remaining Types of Tipping Wagons are constructed on the same principle, but of steel plates of the best quality.

Class No. 1.—(Side Tipping) Double-Side Tipping Wagons.

Type 18 —Capacity of Tipping Box, 5½ cubic feet.

Mounted on steel channel frame, 3 ft. long, with 8 in. diameter chilled iron wheels Type R 51, step bearings, steel axles, without buffers.

„ **19 —Capacity of Tipping Box, 7½ cubic feet.**

This is a long narrow Wagon, specially constructed for tunnel work and mines, mounted on steel channel frame, 3 ft. 10 ins. long, with 8 ins. diameter chilled iron wheels, Type R 51, oil axle boxes, Type 112 B; extreme width, 24 ins., central buffers.

„ **20 A—Capacity of Tipping Box, 9 cubic feet.**

This is especially adapted to all classes of railway, dock, harbour, and building contractor's work, and to supersede wheel-barrow and plank work. It is mounted on steel channel frame, 2 ft. 9 ins. long, with 8 ins. diameter chilled iron wheels, R 51, oil axle boxes, Type B 112, without buffers.

„ **20 C—The same as Type 20 A, but supplied with axle boxes, Type B 112, with 9½ ins. chilled iron wheels, R 50.**

„ **21 —Capacity of Tipping Boxes, 11 cubic feet.**

Specially constructed for tunnel work, mounted on steel channel frame, 3 ft. 2 ins. long, with 8 in. diameter chilled iron wheels, R 51, oil axle boxes, Type B 112, extreme width, 3 ft., with central buffers. (If for hand traction the buffers may be omitted).

„ **22 A—Capacity of Tipping Box, 11 cubic feet.**

Mounted on wrought-iron channel frame, 3 ft. 2 in. long, with 8 in. diameter chilled iron wheels, R 51, oil axle boxes, Type B 112, without buffers.

„ **22 C—The same as type 22A, but with wheels 9½ in. diameter, R 50, oil axle boxes, B112.**

„ **22 D—The same as Type 22 C, but supplied with central buffers.**

„ **22 G—Capacity of Tipping Box, 11 cubic feet.**

Specially constructed for the transport of live coke for use in gas works, and supplied with a sieve bottom, mounted on 12 in. chilled iron wheels, oil axle boxes, Type B 109.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Class No. 1.—Side Tipping—(Continued.)

- Type 23 —Capacity of Tipping Box, 13 cubic feet.**
The same as Type 22 C, but for light work. Extra for central buffers. Extra for screw brake acting on all four wheels.
- „ **24 —Capacity of Tipping Box, 15 cubic feet.**
The same as Type 22 C, but 4 ft. long, mounted on chilled iron wheels 12 in. diameter, Type R 18, and oil axle boxes, Type B 109, without buffers.
- „ **24 B**—The same as Type 24, but mounted on 12½-in. diameter chilled iron wheels, oil axle boxes, Type B 107.
- „ **24 C**—The same as Type 24 B, but supplied with central buffers.
- „ **25 B—Capacity of Tipping Box, 18 cubic feet.**
Mounted on steel channel frame 4 ft. 7 in. long, with 12½-in. diameter chilled iron wheels, R 21, oil axle boxes, Type B 107, without buffers.
- „ **25 C**—The same as Type 25 B, but supplied with central buffers. (6200 of these Wagons used on Panama Canal Works).
- „ **25 D**—The same as Type 25 C, but supplied with one dead and one spring buffer.
- „ **25 F—Capacity of Tipping Box, 18 cubic feet.**
Specially constructed steel Wagon, mounted on 12-in. diameter steel wheels, R 93, oil axle boxes, Type B 107, with buffers.
This wagon can be supplied with two cross channels between the frames to allow the body to be made end tipping by changing the position of the axle boxes.
NOTE :—When arranged for End tipping on a 24-in. gauge the same wheels may be used as for Side tipping, but for a 20 in. gauge wheels of 11 in. diameter or less must be used.
- „ **25 G**—The same as Type 25 F, but constructed with two steel cross-pieces to allow of this Type being converted into an end-tipping wagon.
- „ **25 H**—The same as Type 25 F, but mounted on 11-in. diam. steel wheels, R 30, and constructed with two steel cross-pieces, to allow of this Type being converted into an end-tipping wagon.
- „ **26 —Capacity of Tipping Box, 22 cubic feet.**
Mounted on steel channel frame, 4 ft. 7 in. long, with 12½-in. diameter chilled iron wheels, R 21, oil axle boxes, Type B 109, without buffers.
- „ **26 B**—The same as Type 26, but supplied with oil axle boxes, Type B 107.
NOTE :—This wagon can be supplied at the same price with the body formed of steel end plates but having the bottom and sides of fir, bolted to steel framework and made renewable.
Extra for central spring buffers. Extra for hooks for lifting the body by crane. Extra for vertical screw brake, acting on all four wheels.
- „ **26 C—Capacity of Tipping Box, 36 cubic feet.**
Mounted on steel channel frame with steel wheels 16 in. diameter, R 88, oil axle boxes, Type B 115, one dead and one spring central buffer, constructed for locomotive traction.
- „ **26 D—Capacity of Tipping Box, 58 cubic feet.**
Specially constructed for the transport of coal. Mounted on steel channel frame, with steel wheels 16 in. diameter, R 88, oil axle boxes, Type B 119, with buffers.
- „ **26 E—Capacity of Tipping Box, 27 cubic feet.**
Specially constructed for the transport of coal. Mounted on steel channel frame, with 12½-in. chilled iron wheels, R 21, oil axle boxes, Type B 107, one dead and one spring buffer.
- „ **26 H—Capacity of Tipping Box, 36 cubic feet.**
Wide-pattern tipping box. Mounted on steel wheels 16 in. diameter, R 88, oil axle boxes, Type B 107, buffers.
- „ **26 G—Capacity of Tipping Box, 27 cubic feet.**
Recommended for use with locomotive traction on a 24-in. gauge. Mounted on steel channel frame, with steel wheels 16 in. diameter, R 86, oil axle boxes, Type B 108, supplied with one dead and one spring buffer.

The frames of all the Types of Wagons, Class No. 1, are drilled ready with holes to receive the necessary bolts to attach the buffers and brakes, so that the same can be supplied at any time when required, and no fitting is necessary.

In all the above Types the end standards are firmly bolted to the channel frames.

NOTE :—These Wagons can be made of any required capacity and any gauge from 16 in. to 4 ft. 8½ in.

"DECAUVILLE" Portable and Narrow Gauge Railway.

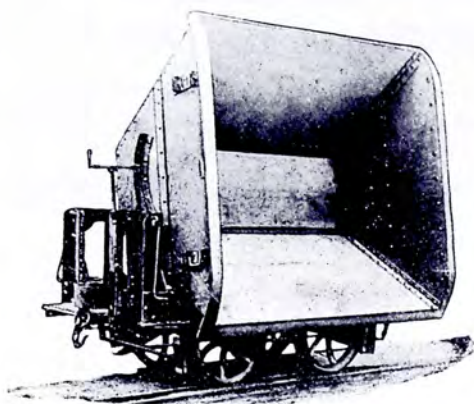


FIG. No. 671.
Special Cradle Tip Wagon of
58 cubic feet capacity.

Class No. 1 (continued).

Special Wagon

Capacity 58 cubic feet.

Side Tipping for animal or locomotive traction, constructed to gauges of 24, 30, and 39 in. The body can also be made to contain up to 72 cubic feet.

Class No. 2.

End Tipping Wagons.

- Type 20 C, End Tip**—The same as Type 20 C, but end tipping only, and mounted on $9\frac{1}{2}$ in. diameter wheels.
 „ **22 C, End Tip**—The same as Type 22 C, but supplied with oil axle boxes, Type B 112, $9\frac{1}{2}$ in. wheels.
 „ **24 C, End Tip**—The same as Type 24 C, but end tipping only, and mounted on $12\frac{1}{2}$ in. diameter wheels.
 „ **25 C, End Tip**—The same as Type 25 C, but supplied with oil axle boxes, Type B 107, $12\frac{1}{2}$ in. wheels.

Class No. 3.

All-Round Tipping Wagons.

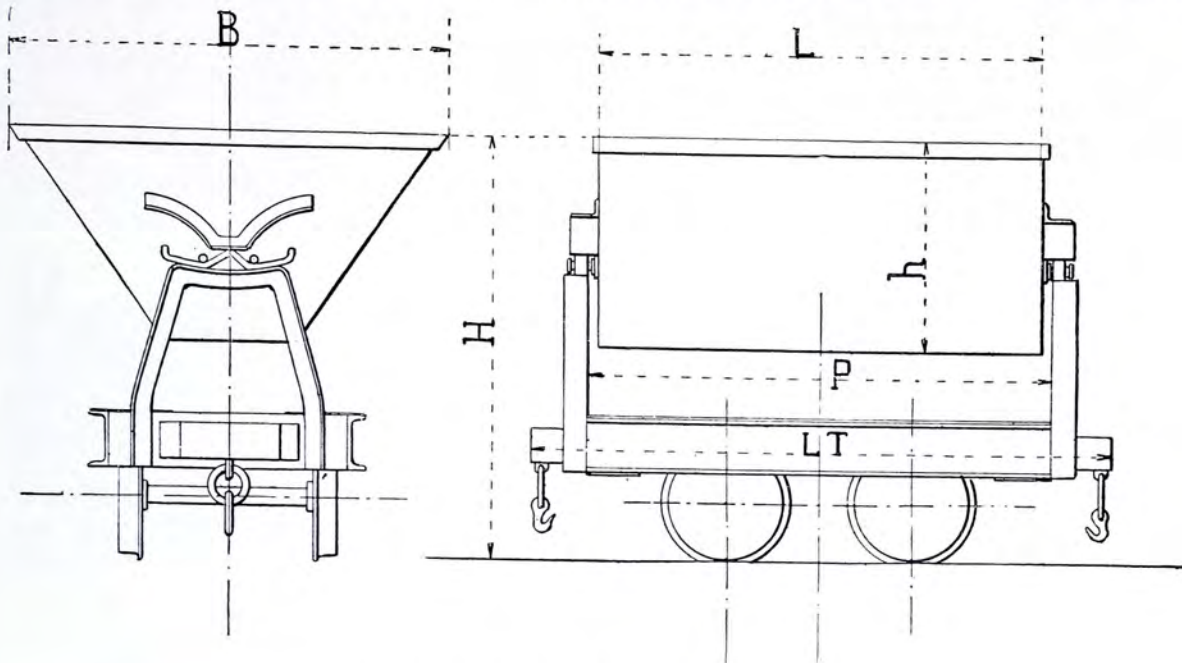
These Wagons are constructed with a wrought-iron turning plate, fitted with a central steel pivot and catch. The standards supporting the tipping box are bolted to the turning plate, so that the contents of the box can be tipped to any direction, or fixed by the catch attached to the turntable, to act as an "end" or "side" tip at will.

- Type 20 Cbis**—The same as Type 20 C, but tipping on all four sides.
 „ **22 Cbis**—The same as Type 22 C, but supplied with oil axle boxes, Type B 112.
 „ **25 Bbis**—The same as Type 25 B, but tipping on all four sides.
 „ **26 Bbis**—The same as Type 26 B, but supplied with oil axle boxes, Type B 107.

All Equilibrium Wagons can be made to tip all round.

"DECAUVILLE" Portable and Narrow Gauge Railway.

**The "Decauville"
DOUBLE-SIDE TIPPING WAGONS.**



PRINCIPAL DIMENSIONS.

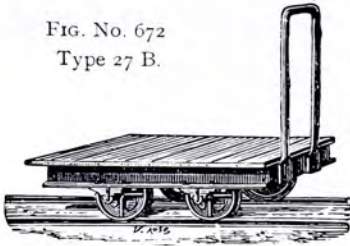
Type	Capacity in Cubic Feet.	Extreme Width, B.	Length of Body, L.	Length of Frame, P.	Total Length over all, L T.	Depth of Tipping Box, H.	Total Height above Rails, H.	Constructed to the following Gauges.	REMARKS.
		ft. ins.	ft. ins.	ft. ins.	ft. ins.	ft. ins.	ft. ins.		
18	5½	1 10½	2 7½	3 0	—	1 8	2 9½	16 and 20 ins.*	*The special dimensions of these 2 types of Wagons do not allow the bodies to advance when being tipped.
19	7½	2 1¼	3 7¼	3 9¾	4 9½	1 5¾	2 9	16 ins.*	
20A	9	3 3	2 7½	2 10	3 9¾	1 8	3 2	16 and 20 ins.	
21	11	3 0	3 0	3 1¼	4 1¾	2 0	3 3	ditto	
22D	11	3 5½	3 0	3 1¾	4 1¾	1 8½	3 4½	16, 20, & 24 ins.	
23	13	3 6½	3 0	3 1¾	4 1¾	1 9¾	3 5	ditto	
24	15	3 5½	3 7	3 9¾	4 9½	1 9¼	3 7¾	ditto	
24B	15	3 8	3 3⅜	3 5	4 3¾	1 10	3 8½	ditto	
25C	18	3 8¼	3 11	4 1¼	5 1	1 10	3 8½	ditto	
25F	18	3 8¼	3 11	4 1¼	5 1	1 10	3 8	ditto	
26B	22	4 0	3 11	4 1¼	5 1	2 1½	4 0	ditto	
26E	27	3 10¼	4 7	4 9	5 9	2 3½	4 4	ditto	
26G	27	4 10	4 0	4 2	5 1¾	2 3½	4 5	ditto	
26C	36	4 11	4 11	5 1¾	6 4¾	2 4¼	4 5¼	24 and 30 ins.	
26H	36	5 0	4 3	5 1	6 0¾	2 6¾	4 9¼	ditto	
26D	58	5 7	5 3	5 7½	6 7	2 11½	5 3	ditto	

NOTE.—The dimensions of this type of Wagon may be varied to any extent, but it is recommended that the standard dimensions should be adopted as much as possible, because they have been determined after long experience. These Wagons can also be made to any other Gauge than those shown. The new types of tip Wagons of capacities of 27, 36, 58 cubic feet cradle tipping, reduces the total height of the Wagon considerably, and greatly facilitates the labour of loading them. One man is sufficient for tipping the Wagons of 58 cubic feet capacity. This tipping arrangement considerably increases the rigidity of the frame and of the standards of the Box.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Small Platform Wagons.

FIG. No. 672
Type 27 B.



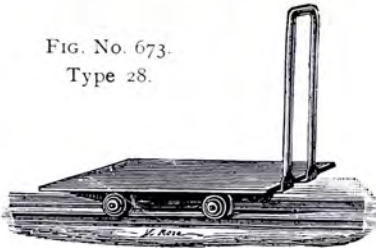
Type 27 B—Platform Wagon with a hardwood platform 3 ft. 3 in. long, mounted on steel channel frame, with chilled iron wheels 8 in. diameter, Type R 51, and oil axle boxes, Type B 112; pushing bar at one end.

„ **27 C**—The same, with iron platform.

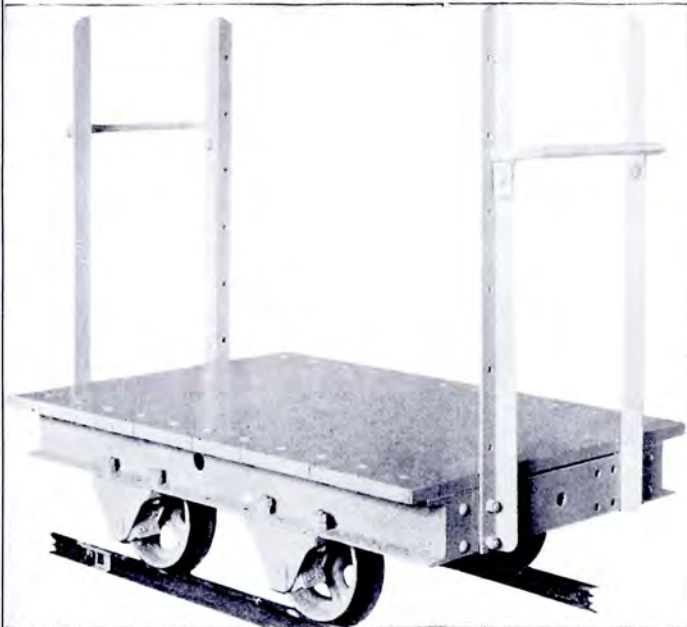
„ **27 E**—The same, with wheels $9\frac{1}{2}$ in. diameter, R 50.

„ **27 G**—The same with wood platform.

FIG. No. 673.
Type 28.



Type 28—Platform Wagon, constructed entirely of metal, 2 ft. $7\frac{1}{2}$ in. long, by 2 ft. wide and $4\frac{3}{4}$ in. high, mounted on solid metal wheels $3\frac{1}{4}$ in. diameter; pushing bar at one end.



Type 29 B—Platform Wagon, with oak platform 3 ft. 3 in. long, supplied with a steel channel frame, mounted on chilled iron wheels 8 in. diameter, Type R 51, and oil axle boxes, Type B 112; pushing bars at both ends.

Type 29 C—The same as Type 29 B, but 4 ft. 1 in. long, mounted on chilled iron wheels $9\frac{1}{2}$ in. diameter, Type R 50.

Type 29 E—The same as Type 29 C, but 4 ft. 7 in. long, mounted on chilled iron wheels $12\frac{1}{2}$ in. diameter, Type R 21, oil axle boxes, Type B 107.

Type 29 G—The same as Type 29 E, platform 5 ft. long by 2 ft. 6 in. wide, mounted on chilled iron wheels 12 in. diameter, Type R 18, oil axle boxes, Type B 109.

Type 29 H—The same as 29 G, end bars forming an inclined plane.

FIG. No. 674. Type 29B.

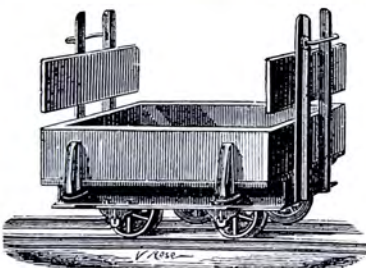


FIG. No. 675. Type 30 B.

Type 30 B—Wagon, with movable wood box 3 ft. 3 in. long, supplied with steel channel frame, mounted on chilled iron wheels 8 in. diameter, Type R 51, and oil axle boxes, Type B 112; pushing bars at both ends.

„ **30 C**—The same as Type 30 B, 4 ft. 1 in. long, mounted on wheels $9\frac{1}{2}$ in. diameter, Type R 50.

„ **30 D**—The same as Type 30 C, 4 ft. 7 in. long, mounted on wheels 12 in. diameter, Type R 18, oil axle boxes, Type B 109.

„ **30 E**—Same Wagon mounted on chilled iron wheels $12\frac{1}{2}$ in. diam., oil axle boxes, B 107, suitable for use with wagon 25 B. Extra for central buffers.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Small Platform Wagons—(Continued).

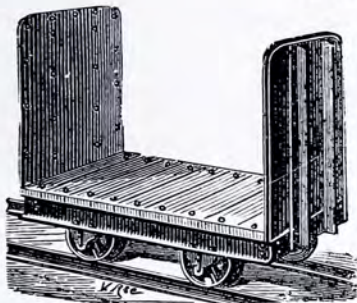


FIG. No. 676. Type 31 B.

Type 31 B—Wagon for general work or use on brickfields, mounted on steel channel framing 3 ft. 3 in. long, hardwood platform, with angle-iron uprights and plated ends, with 8 in. diameter chilled iron wheels, R 51, and oil axle boxes, Type B 112.

NOTE.—An allowance will be made off Type 31 B if wooden platform is not required

.. **31 C**—The same as Type 31 B, but 4 ft. 2 in. long, and mounted on 9½ in. wheels, R 50.

.. **31 D**—The same as Type 31 C, but 4 ft. 8 in. long, mounted on 12 in. wheels, and oil axle boxes, Type B 109.

.. **31 E**—The same as Type 31 D, but mounted on 13 in. wheels, and oil axle boxes, Type B 107.

Extra if fitted with buffers at each end for horse traction.

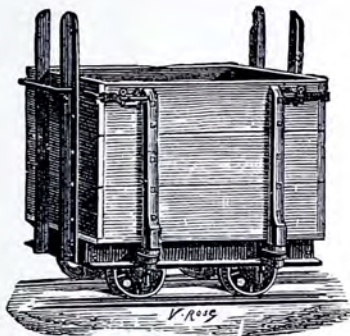


FIG. No. 677. Type 33 B.

Type 33 B—Wagon for use on farms for the transport of manure, roots, etc., fitted with two wooden movable sides and fixed wooden ends, 3 feet 3 in. long; mounted on steel channel frame, with 8 in. diameter chilled iron wheels, R 51, and oil axle boxes, Type B 112.

.. **33 C**—The same, length 4 ft. 1 in., wheels 9½ in. diameter.

.. **33 D**—The same as Type 33 B, but 4 ft. 8 in. long, mounted on 12 in. wheels and oil axle boxes, Type B 109.

.. **33 E**—The same, on 12½ in. diameter wheels, R 21, oil axle boxes, B 107.



FIG. No. 678. Type 34 B.

Type 34 B—Barrel Wagon, constructed for use in wine vaults and distilleries, etc., supplied with two curved supports of wrought-iron, enabling a pipe of wine to rest in position while being transported. The steel under-frame, 4 ft. 2 in. long, is mounted on 8 in. diameter wheels, oil axle boxes, Type B 112, without buffers.

Extra for central buffers.

Extra for inclined plane to roll barrel on the Wagon.

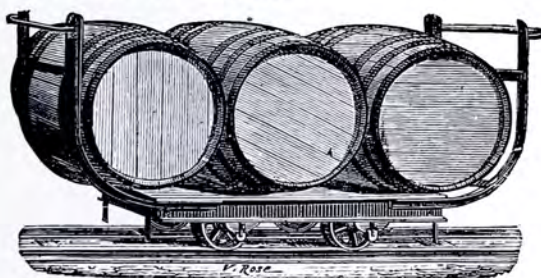


FIG. No. 679. Type 35 B.

Type 35 B—Wagon, constructed to carry three full or five empty oil barrels, mounted on steel frame 4 ft. 2 in. long, and supplied with extending angle-iron ends, fitted with pushing bars, the extreme length being 6 ft. 7 in., 8 in. diameter chilled iron wheels, oil axle boxes, Type B 112.

Extra for extending buffers.

Type 36 B—Cistern Wagon for the transport of water or liquids, cistern to hold 130 gallons, fitted with filling hole and cover at top and one draw-off tap at bottom, mounted on 8 in. chilled iron wheels, and oil axle boxes, Type B 112.

Type 37—Pivoting Wagon, platform turning on facing strip, pivot supported by transverse steel angles, eye bolt and ring at each corner on cast steel wheels, 11 in. diameter, R 30, oil axle boxes, Type B 107

Type 38—Wagon on free axles to carry 4½ tons, cast-steel wheels, 11 in. diameter, Type R 30, mild steel axles, steel step bearings, steel plate platform, turned roller path, strengthening piece for the pivot, mounted upon two transverse steel angles, eye bolts and rings at each corner. Extra for 2 levers suitable for uprights.

Type 39 B—Wood Platform Wagon, 4 ft. 1 in. long by 2 ft. 7½ in., mounted upon cast-steel wheels, 11 in. diam., Type R 30, with 2 pushing bars, and 4 movable sides, for transporting shell to carry 2 tons.

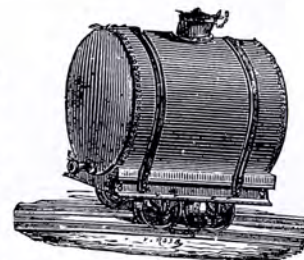


FIG. No. 680. Type 36 B.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Type 40—Platform Wagon, for transporting boilers or large pieces of machinery up to 6 tons. The platform is carried upon 2 wagons of either Type 37 or Type 60, and passes easily along curves of a very small radius and over turntables.

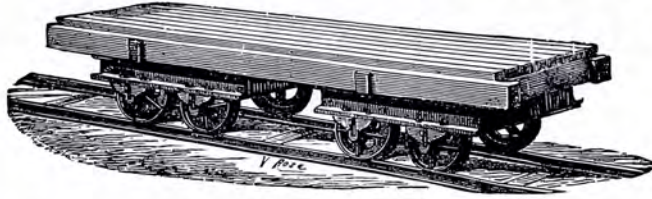


FIG. No. 681. Type 40 B.

Type 40 B—Platform Wagon, of strong construction, to carry loads up to 6 tons per wagon, supplied with a hardwood platform 9 ft. 10 in. by 4 ft., mounted on 2 channel steel bogies, Type 60, to allow of the Wagon being worked on sharp curves and turntables, without buffers.

Type 40 C—The same as Type 40 B, but mounted on bogies with three axles, to carry up to 9 tons per wagon, without buffers. Extra for buffers.

Type 40 K—Extra strong type of Platform Wagon, supplied with hardwood platform, 9 ft. 10 in. by 4 ft., mounted on bogies with 3 axles, to carry loads up to 12 tons per wagon, with 12½ in. diameter chilled steel wheels, R 8, and oil axle boxes, Type B 125, without buffers or brake.

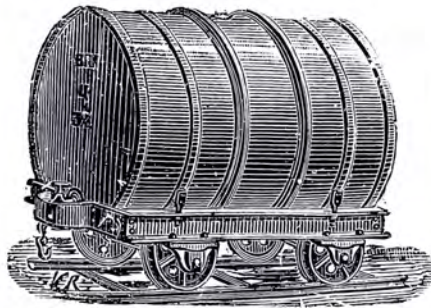


FIG. No. 682.

Type 43.

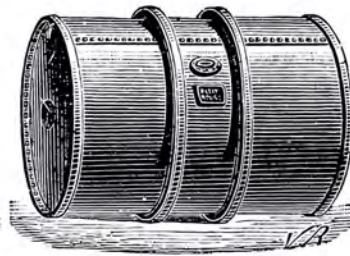


FIG. No. 683.

Type 43—Cistern Wagon, for the transport of Water and other liquids, supplied with a galvanized iron cistern of 150 gallons capacity, fitted with two iron rings, so as to allow the same to be rolled with ease when detached from wagon; filling hole and screw plug at top, and two draw-off taps at ends. Mounted on a steel channel frame 4 ft. 2 in. long, 12 in. diameter chilled iron wheels, R 18, steel axles, oil axle boxes, Type B 107, central buffers.

Cistern only.

Type 46—Wagon for transporting shell on 8 in. wheels, R 49, with ring bolt at each end of frame.

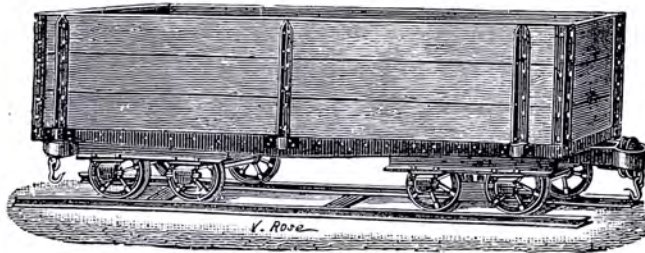


FIG. No. 684. Type 48.

Type 48—Goods Wagon. Constructed for the transport of coal, coke, and general goods, 13 ft. long by 4 ft. wide, to carry 3 tons of coal, metal platform, steel angle uprights, and hardwood body 2 ft. 2 in. high, mounted on 2 channel steel bogies, supplied 12½ in. diameter wheels, Type R 21, oil axle boxes, Type B 109, with buffers.

Type 48 B—The same as Type 48, but fitted with oil axle boxes, Type B 107.

Type 48 C—The same as Type 48 B, but fitted with one spring and one dead buffer, for light locomotive or animal traction.

Type 48 E—The same as Type 48, but mounted on 11 in. diameter steel wheels, Type R 30, and steel step bearings, Type B 25, for the transport of timber, etc.

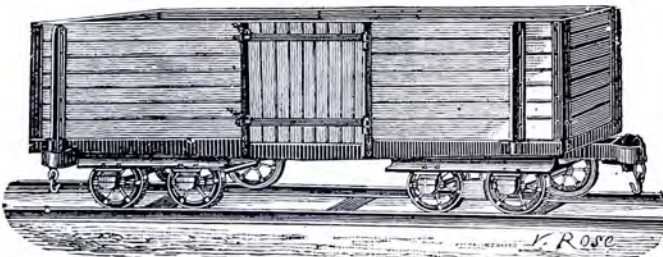


FIG. No. 685. Type 48 D.

Type 48 D—The same Type as 48 C, but fitted with a door on each side 32 in. wide.

Extra for screw brake.

"DECAUVILLE" Portable and Narrow Gauge Railway.

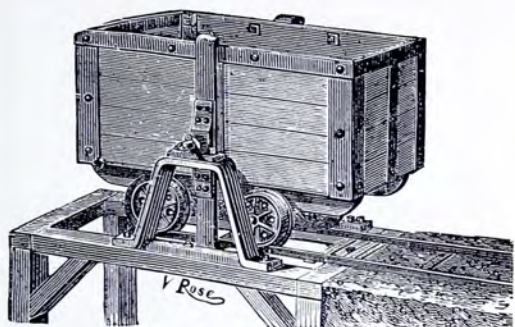


FIG. No. 686.

Berline Type 51

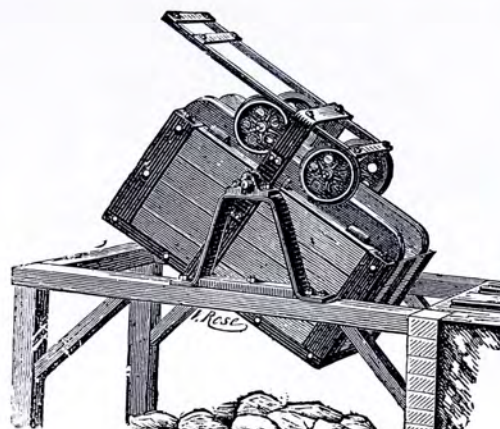
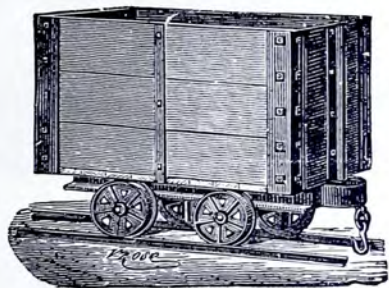


FIG. No. 687.

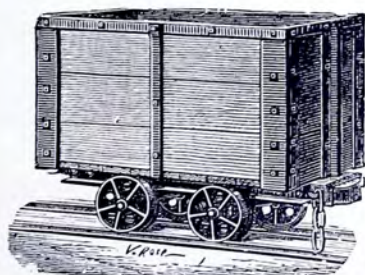
Type 51—Mineral Truck. The frame, buffers, and body of hard wood, with corners strengthened with mild steel angle pieces, 18 cubic feet capacity, mounted on cast steel wheels 11 in. in diameter, Type R 30, mild steel axles, and steel step bearings, Type B 25.
Metal portions only.

FIG. No. 688.
Type 52.

Type 52—Mineral Truck, steel frame and buffers, hard wood body strengthened with mild steel angle pieces, 22 cubic feet capacity, mounted on cast steel wheels 11 in. diameter, Type R 30, mild steel axles, steel step bearings, Type B 25.

Metal portion only.

Extra for steel strengthening pieces round upper part of body.

FIG. No. 689.
Type 53.

Type 53—Mineral Wagon for quarries, steel underframe, wood buffers, fitted with double couplings for use on inclined planes, hard wood body with the corners strengthened with mild steel angle pieces, steel strengthening pieces on upper part of body, 22 cubic feet capacity, mounted on cast steel wheels 11 in. diameter, Type R 30, with steel axles, steel step bearings, B 25.

Metal portion only.

Type 54—Mineral Truck, channel frame and steel buffers, hard wood body 22 cubic feet capacity, with side door, corners strengthened with mild steel angle pieces, and upper part of body strengthened with steel band, mounted upon cast steel wheels 11 in. diameter, R 30, mild steel axles, and steel step bearings, B 25.

Metal portion only.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Type 55.—Mineral Truck constructed entirely of steel, capacity 18 cubic feet, mounted on cast steel wheels 11 inch diameter, Type R 30, with step bearings, Type R 25, with hard wood buffers.

Type 56.—Mineral Truck constructed entirely of steel, with rounded bottom, capacity 15 cubic feet, length 3 ft. 7 ins., width 2 ft. 3 ins., total height above Rails 3 ft., wheels and axles same as Type 55.

Type 58.—Special Wagons for the transport of fragile material in potteries and glass works, etc., with hard wood platform, 3 ft. 3 ins. long, 2 ft. 7½ ins. wide, with push bar at one end, mounted upon 9½ in. diameter cast steel wheels, Type R 30, with oil axle-boxes with springs, Type B 123.

Type 58B.—Same, but 4 ft. 1 in. long.

Type 59B.—Special side tip Wagon for the transport of fruit and vegetables, etc., length 3 ft. 3 ins., steel body, 11 cubic feet capacity, having special angle steel supports bolted on square channel steel frame, mounted on 9½ ins. diameter chilled iron wheels, Type R 50, oil axle-boxes, Type B 112.

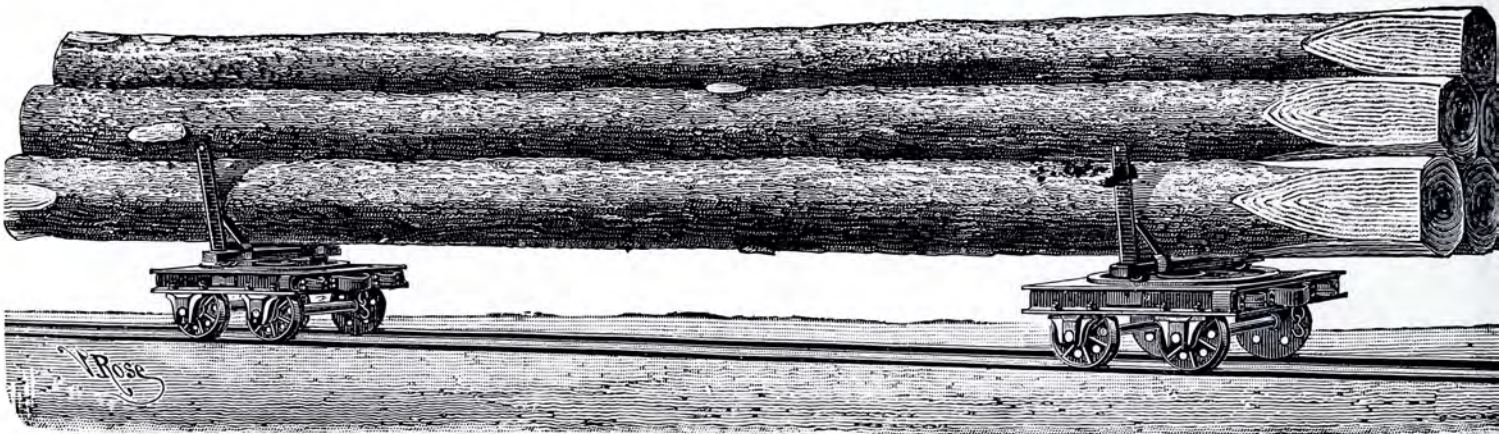


FIG. No. 690. Type 60.

Type 60.—Steel Channel Bogies, 3 feet 3 inches long, specially constructed to carry trees, logs and rails up to 3 tons in weight; mounted on 11-inch diameter steel wheels, Type R 30, steel step bearings, Type B 25, without pivoting fork.

Type 60A.—The same as Type 60, but with buffers.

Type 60B.—The same as Type 60 A, but supplied with a pivoting fork, fitted with roller and 32-inch diameter roller path.

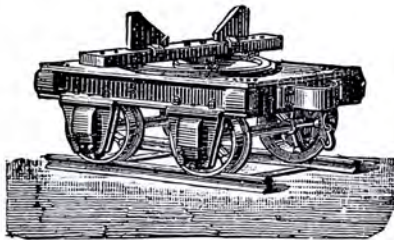


FIG. No. 691. Type 60 C.

Type 60C.—The same as Type 60 B, but mounted on 12½-inch diameter ordinary wheels, and oil axle-boxes, Type B 107.

Type 60D.—The same as Type 60 B, but supplied with central extended buffers, uprights and wedges for pivoting cross-bar, extra for brake acting on all four wheels, ordinary metal pivoting cross-bar, special steel pivoting cross-bar and fittings.

Type 60D.—Channel steel Bogie, with pivoting fork, mounted on rollers and fitted with movable arms, for the transport of trees of any size.

A set of 2 Wagons, Type 60 B, with pivoting fork, on rollers as shown in figure 690, and fitted with brake. Steel platform 13 feet long, 4 feet wide. Extra for vertical screw brake, and platform for Brakesman.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Platform Wagons

For the Transport of Wood, Sugar Cane, &c., and for General Agricultural Purposes.

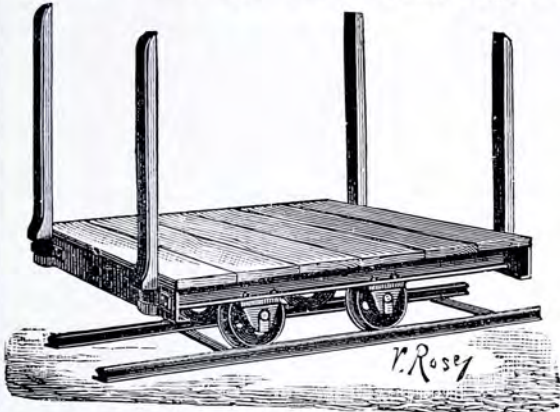


FIG. No. 692 Type 61.

Type 61—Platform Wagon to carry up to 3 tons, with channel steel underframe 4 ft. 11 in. long by 4 ft. wide; hardwood platform and four removable angle iron uprights, with sockets at ends, mounted on 11-in. diam. steel wheels, Type R 30, and steel step bearings, Type B 25.

„ **61 A**—The same as Type 61, but supplied with central buffers.

„ **61 C**—The same as Type 61 A, but mounted on 12½-in. diameter ordinary wheels, and oil axle boxes, Type B 107.

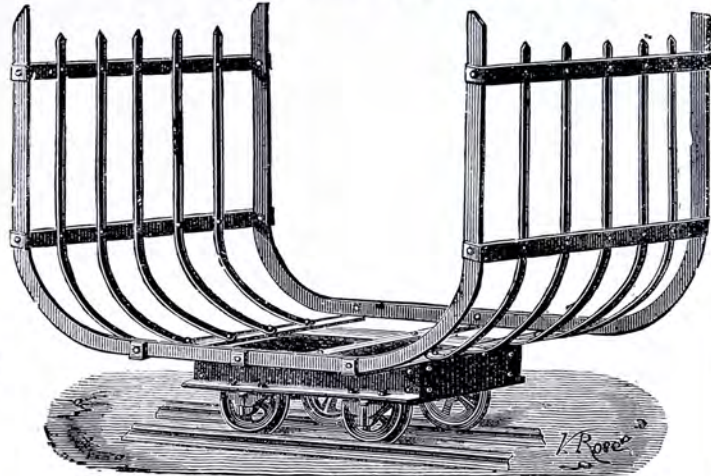


FIG. No. 693. Type 63.

Type 63 B—Specially constructed for the transport of hay, fodder, faggots, &c., channel steel underframe, 3 ft. 3 in. long, mounted on 11-in. diameter wheels, Type R 50, oil axle boxes, Type B 112, with extending cradle 6 ft. 6 in. long by 5 ft. wide by 5 ft. high.

Cradle only for Type 63.

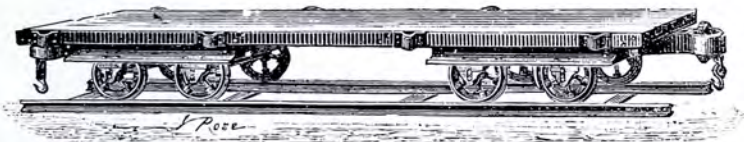


FIG. No. 694. Type 65.

Type 65—Metal Platform Wagon, 13 ft. long by 4 ft. wide, mounted on two channel steel bogies, Type 60, with 12½-in. diameter wheels, Type R 21, oil axle boxes, Type B 107, and eight wood uprights & sockets, with buffers.

Extra for vertical brake and seat.

Extra for eight steel wheels, 12½ in. diameter, R 89.

Type 65 B (see Fig. No. 695)—The same as Type 65, but with movable wooden lattice sides and ends.

„ **65 C** (see Fig. No. 696)—The same as Type 65, but with iron lattice work on two sides.

„ **65 D**—The same as Type 65, but specially designed for the transport of tobacco.

„ **65 T**—The same as Type 65, but 4 ft. 7 in. wide, and metal cradle 3 ft. 3 in. high, mounted on two channel steel bogies, with 16-in. diameter steel wheels, Type R 86, oil axle boxes, Type B 107.

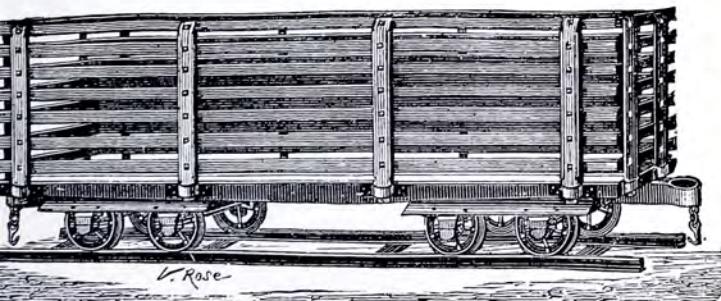


FIG. No. 695. Type 65 B.
Sugar Cane Wagon.

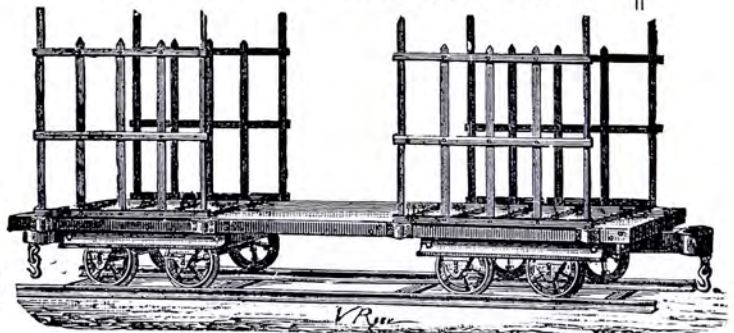


FIG. No. 696. Type 65 C.
Sugar Cane Wagon.

"DECAUVILLE" Portable and Narrow Gauge Railway.

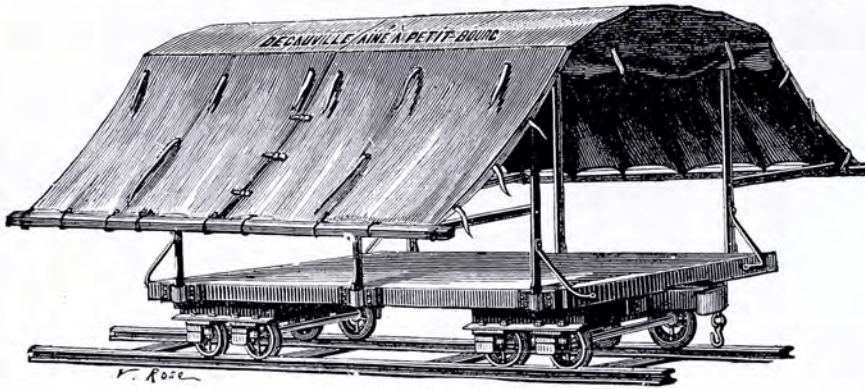


FIG. No. 697. Type 66.

Type 66—Same as Type 65, with 3 flat iron hoops, fitted at the top with 9 wood strips, and tarpaulin, completely covering the wagon.

Type 66 T—Steel platform on bogies with 8 cast-steel wheels, 16 in. in diameter, Type R 86, oil axle boxes, B 107, with iron hoops, fitted with 9 wood strips and tarpaulin completely covering the Wagon, with buffers.

Type 67—Same as Type 66, with 2 seats placed back to back, to carry 6 passengers.

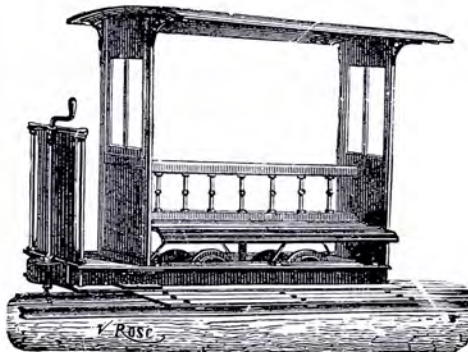


FIG. No. 698. Type 68.

Type 68—Passenger Car, with seats placed back to back, to carry 8 passengers, without brake or platform for driver, mounted upon chilled iron wheels 12½ in. in diameter, type R 21, oil axle boxes, B 109.

Type 68C—Same, but mounted on springs, oil axle boxes, B 123.

Extra for brake acting on 2 wheels, and platform for driver as shown on figure

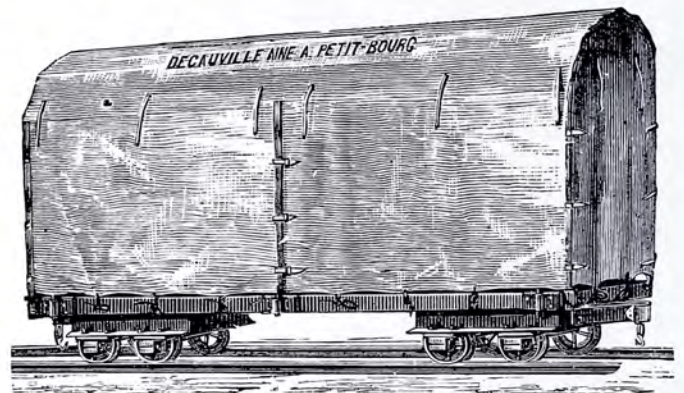


FIG. No. 699. Type 66.

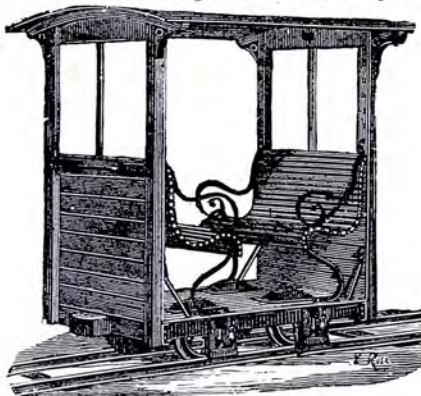


FIG. No. 700. Type 69.

Type 69—Inspection Car, to seat four, mounted upon springs, with spring oil axle boxes, Type B 123, mounted upon chilled iron wheels, 12 in. in diameter, R 18.

Type 69 B—Same, with brake and platform for driver at one end.

Type 69 C—Same, with brake and platform for driver at both ends.

Type 70—Inspection Car to seat two, with oil axle boxes, Type B 109, without springs.

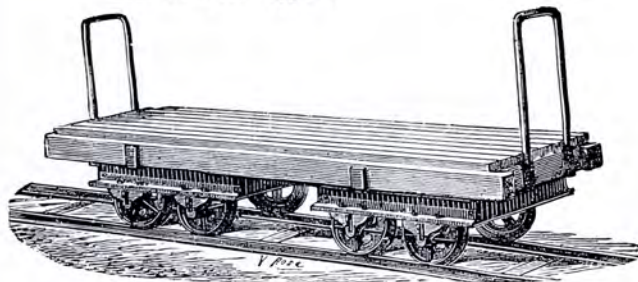


FIG. No. 701. Type 71.

Type 71—Platform Wagon, to carry up to 1 ton, supplied with a hardwood platform 9 ft. 10 in. long by 3 ft. 3 in. wide, mounted on 2 channel iron bogies 27½ in. long, 9½ in. diameter, wheels, Type R 50, oil axle boxes, Type B 2.

Type 71 B—The same as Type 71, but supplied with oil axle boxes, Type B 112.

Extra for 2 pushing bars, one at each end.

"DECAUVILLE" Portable and Narrow Gauge Railway.

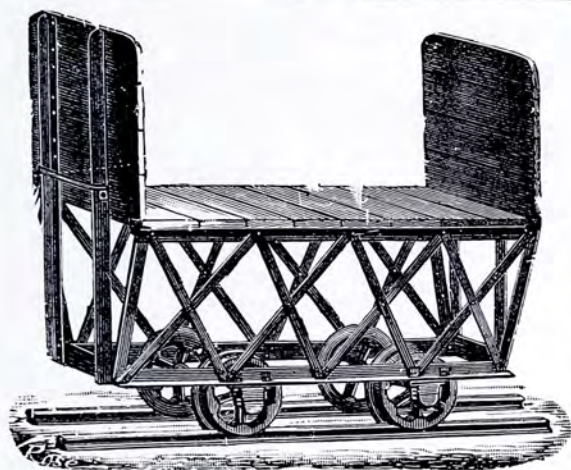


FIG. No. 702. Type 74.

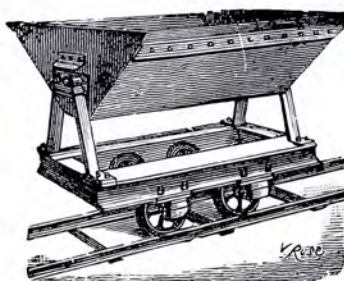


FIG. No. 703 Type 75.

Type 74—Wagon, with raised hardwood platform, 6 ft. long by 3 ft. 11 in. wide, hardwood ends, strengthened with angle irons, mounted on lattice frame, supplied with 12½ in. diameter chilled iron wheels, Type R 21, oil axle boxes, Type B 109, pushing bar at each end, without buffers.

Type 75—Special Wagon for the transport of salt, with tipping box with inside completely lined with wood, capacity 9 cubic feet, mounted upon chilled iron wheels 9½ in. in diameter, Type R 50, mild steel axles, oil axle-boxes, Type B 112, without buffers.

Extra for central buffer at each end.

Type 80—Special Wagon similar to Type 60, but of a lighter construction fitted with pivoting fork, arranged for the fixing of planks to form a platform 14 ft. to 16 ft. long, supported on two wagons, Type 80, for hull of boats etc., each wagon 3 ft. 3 in. long, with cast steel wheels 11 in. in diameter, R 30, steel step bearings, B 14, with circular roller path with eye bolts at each end, and steel strengthening pieces at the four corners.

Forged iron pivoting fork 3 ft. 11 in. long, fitted with wood chocks, and four eye bolts and rings.

A set of two wagons, Type 80, to carry a launch of three tons.

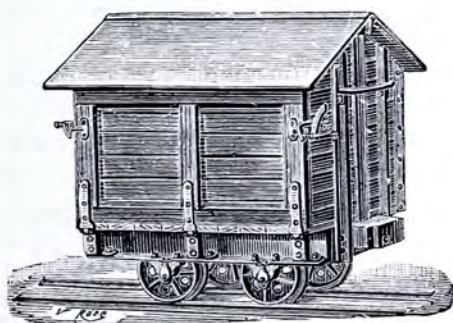


FIG. No. 704. Type 81A.

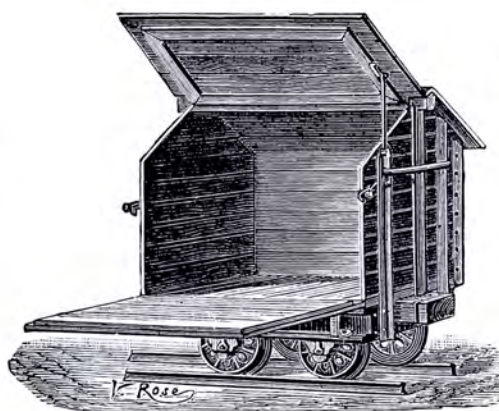


FIG. No. 705.

Type 81 A—Special Box Wagon for the transport of explosives, with a bottom of oak wood, inside length 3 ft. 3 in. by 2 ft. 3 in. wide by 2 ft. 7½ in. high, with one side of the roof arranged to lift up and one side to fall down, mounted upon chilled iron wheels 12 in. in diameter, R 18, mild steel axles, oil axle-boxes, B 109.

All heads of the bolts in the interior of the wagon are of copper.

Type 82 A—Same, but of a larger size 4 ft. 7 in. long, 3 ft. 3 in. wide, 3 ft. 3 in. high.

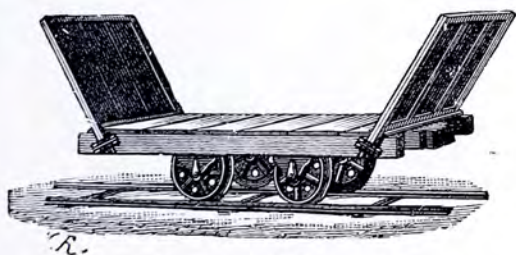


FIG. No. 706. Type 83A.

Type 83 A—Special Wagon for the transport of material used in gun powder factories, having movable wood ends, platform 4 ft. 7 in. long, 3 ft. 3 in. wide, mounted upon chilled iron wheels 12 in. in diameter, R 18, mild steel axles, oil axle-boxes, B 109.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Special Type, constructed with opening bottom, for the transport of coke, sand, sugar, and other materials.

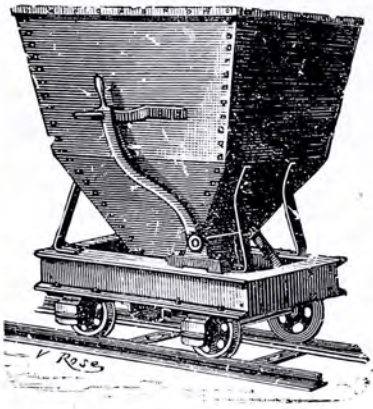


FIG. No. 707.
Type 87.

Type 87—Capacity, 80 cubic feet.

Specially constructed to carry coke and to discharge load from bottom through a door opened and closed by a lever; steel wheels 18 in. in diameter, Type R 85, oil axle boxes, Type B 124, with buffers.

.. 88—Capacity, 22 cubic feet.

The same as Type 87, but specially constructed for carrying heavy minerals and for use in sugar refineries, mounted on channel steel frame, 3 ft. 3 in. long, 9½-in. diameter chilled iron wheels, Type R 50, oil axle boxes, Type B 109, without buffers.

.. 88 B—The same as Type 88, but supplied with central buffers.

Cylinder Tipping Wagons.

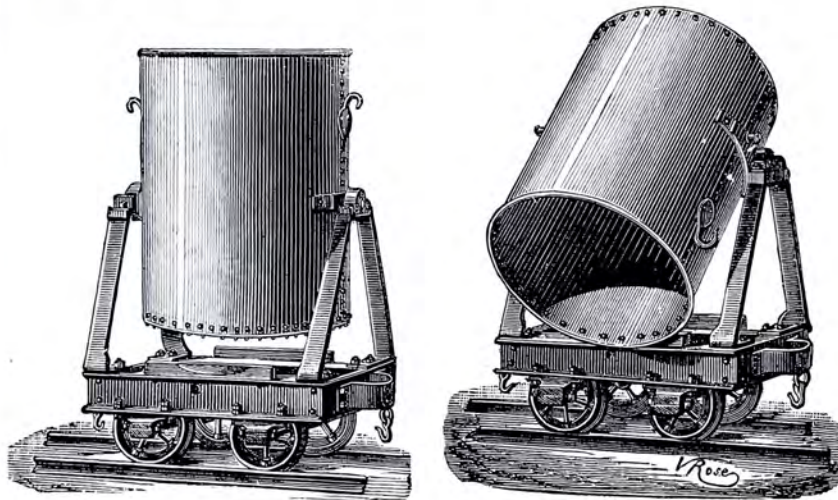


FIG. No 708. Type 90.

Type 90.

Capacity 22 cubic feet.

Constructed for the transport of coal, coke, ballast, earth, &c., supplied with a cylinder tipping box, fitted with two hooks for lifting with crane, mounted on 11½-inch diameter wheels, Type R 18, oil axle boxes, Type B 107, with central buffers.

Type 90 C—Capacity, 11 cubic feet.

The same as Type 90 but oil axle boxes, Type B 109.

Type 90 D—Capacity, 9½ cubic feet.

The same as Type 90, but mounted on 9½-in. wheels, Type R 50, oil axle boxes, B 112, without buffers.

Drying Wagons.

Type 91—Specially constructed for use in CHINA and POTTERY WORKS, &c., supplied with open frame, 4 ft. long by 2 ft. 7 in. wide by 3 ft. 8 in. high, fitted with angle-iron supports to receive trays, 9½-in. diameter wheels, Type R 21, steel step bearings, B 15.

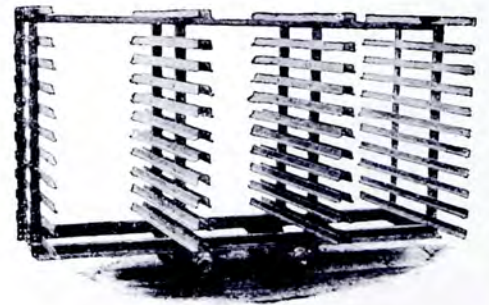


FIG. No 709 Type 91.

"DECAUVILLE" Portable and Narrow Gauge Railway.

WAGONS for Agricultural Purposes.

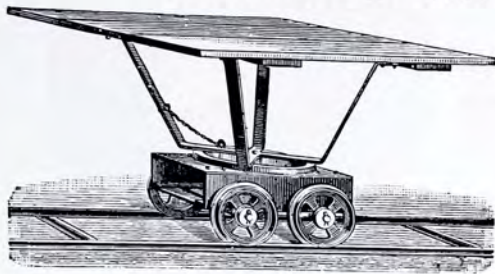
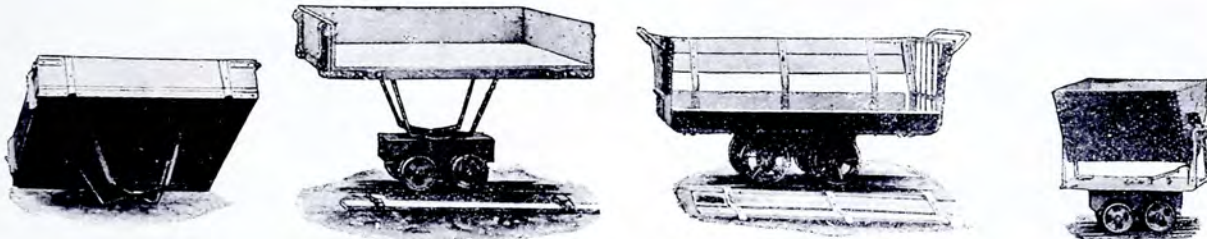


FIG. No. 710. Type 93.

THESE Wagons are specially designed for narrow gauges, and the transport of farm produce of every description, and types designed for special purposes are continually added to the stock.

Type 93—Pivoting Wagon for carrying glass lights for hot houses, having a frame of channel steel 20 in. long, with fixed axles, chilled iron wheels 8 in. in diameter, R 49, square pivoting wood platform 4 ft. 5 in., mounted on iron supports.



Type 93. FIG. No. 1.

Type 93. FIG No. 2

Type 93. FIG. No. 3.

Fig. No. 1.—Extra for movable sides forming a box 12 in. high.

Fig. No. 2.—Extra for metal bucket to be fixed on the truck and having a length of 4 ft. 9 in. with wood bottom, with open work ends and movable sides.

Fig. No. 3.—Extra for tipping body 13 cubic feet capacity, with pivoting platform, allowing the boxes to be tipped in any direction and fixed to the truck.

Type 93 supplied with all these accessories.

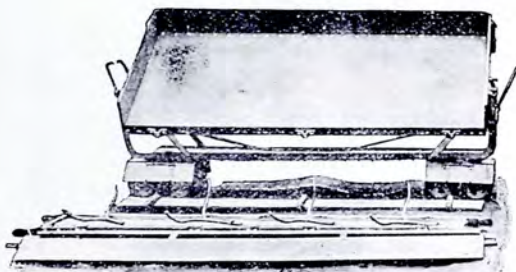
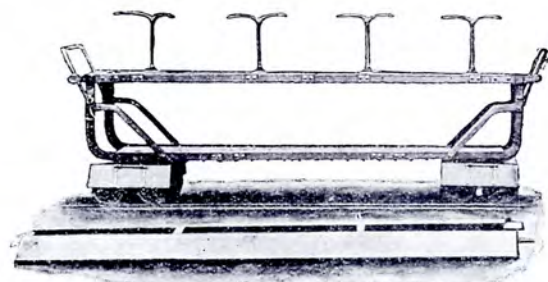


FIG. No. 711.



Type 94 B.

FIG. No. 712

Type 94 B—Transformable Wagon composed of:—

- (1) Steel frame 8 ft. 11 in. long with wood bottom, mounted upon two channel steel trucks with mild steel axles with $1\frac{5}{8}$ in. diameter journals, chilled iron wheels 8 in. in diameter, Type R 49, oil axle-boxes with brass bearings, B 19, with hinged wheel guards.
- (2) One movable platform with angle steel frame furnished with 10 sockets and four supports capable of being placed either to the right or left with hand rail, height of platform above rails 2 ft. $7\frac{1}{2}$ in.
- (3) One tipping platform 8 ft. 6 in. long, 3 ft. 11 in. wide, with strong angle steel frame fitted with tie rods, and 10 sockets and movable sides forming a box $9\frac{1}{2}$ deep.

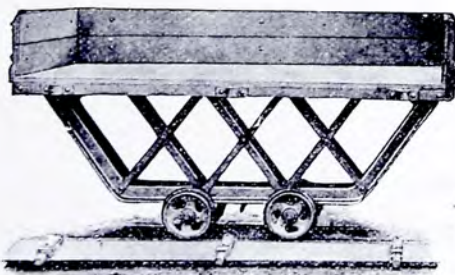


FIG. No. 713. Type 95.

Type 95—Wagon similar to Type No. 7B with raised platform, furnished with sockets for the reception of movable sides forming the box. This wagon is made to any dimension and capacity of box. Price varying according to dimensions.

"DEGAUVILLE" Portable and Narrow Gauge Railway.

Type 1—3-Wheeled Luggage Trolley, 3 ft. 9 in. long by 2 ft. 4 in. wide, entirely constructed of metal.

Type 2—The same as Type 1, but wheels fitted with rubber tyres.

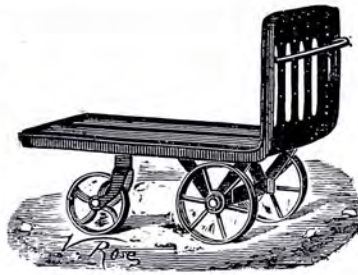


FIG. No. 714. Type 1.

Type 3—Luggage Trolley, constructed with hardwood platform and ends 3 ft. 7 in. long by 2 ft. 4 in. wide.

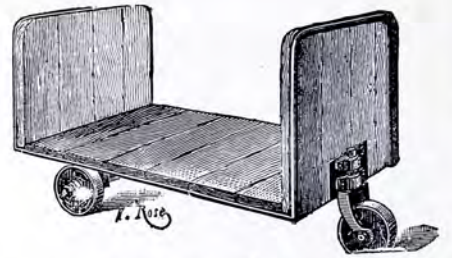


FIG. No. 715. Type 3.

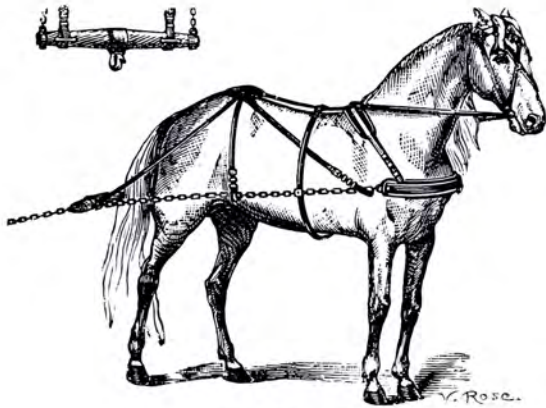


FIG. No. 716.

Harness.

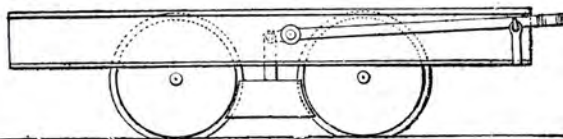
For animal traction of Wagons, etc., requires to be of special design different to that usually found in works and farms. Special type of harness has been designed with leather covered chain, etc.

- Complete Harness for Tram Car.
- Complete Harness with collar for horse or mule.
- Splinter Bar only.
- Chain Traces 15 ft. long for one horse.
- Same, but for 2 horses.

Brakes. (Principal Types).

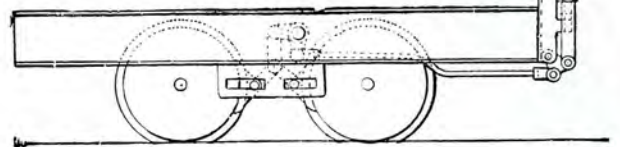
For Tipping & Platform Wagons.

FIG. No. 717. Pattern A.



Pattern A—Lever Brake, acting on all four wheels, of very simple construction, and suitable for all the Types of Wagons.

FIG. No. 718. Pattern B.



Pattern B—Vertical Screw Brake, of great power, acting on all four wheels, specially recommended for steep gradients.

Pattern C—Foot Brake, acting on two wheels only, suitable for light work.

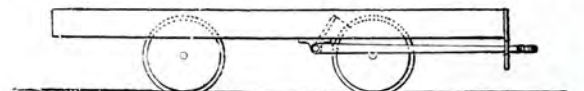


FIG. No. 719. Pattern C.

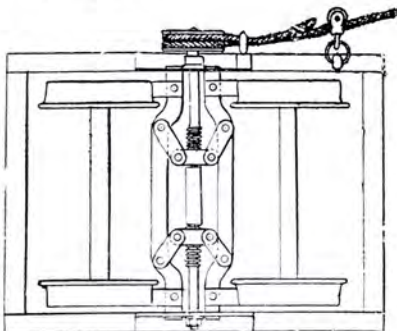


FIG. No. 720.

Horizontal Screw Brake. Type E—This special brake, which is of most powerful construction and acts upon all four wheels, is generally employed with Wagon Type 37. It is controlled by a side pulley and by means of a rope, and is mostly used with Wagon Type 60 for the transport of trees.

Type E.

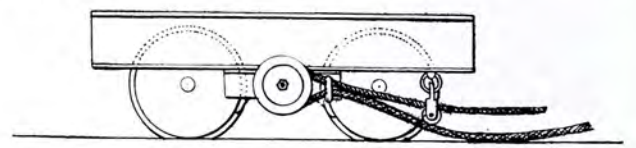
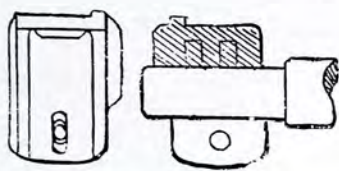


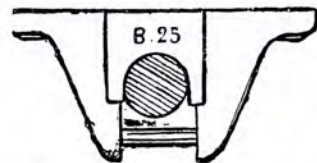
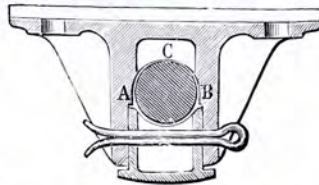
FIG. No. 721.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Axle Boxes—Steel Steps.

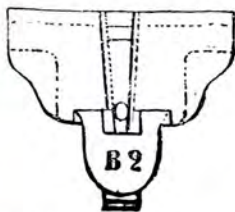
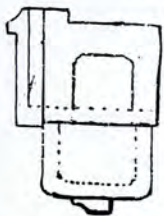


Type.	Diam. of Journal.
B 15	1 $\frac{3}{16}$ in.
B 14	1 $\frac{1}{8}$ in.
B 25	1 $\frac{3}{16}$ in.

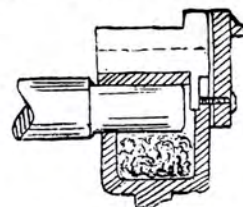
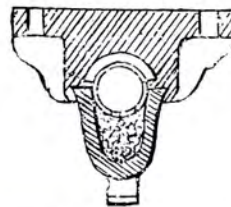


This Type of Axle Box is very strongly made, and is specially adapted for use on wagons which are liable to frequent shocks. The grease used as lubricant is put in at A and B, and stored in the recess C.

The Improved Economical Oil Axle Box.



Type.	Diam. of Journal.
B 2	1 in.
B 3	1 $\frac{3}{16}$ in.
B 4	1 $\frac{1}{8}$ in.



This Type is constructed with a cup, which is held in position by a taper tray and set screw; the lubrication is effected by means of a sponge, which is kept well oiled and in contact with the journal of the axle.

Oil Axle Boxes.

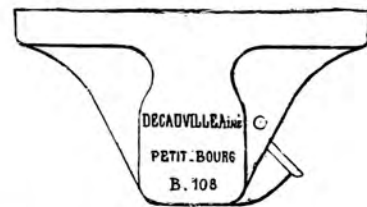
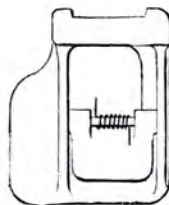
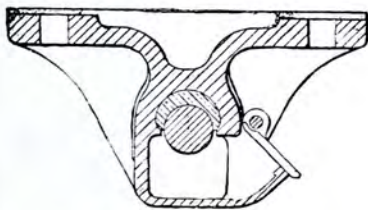


FIG. No. 722.

This Type is of extra strong pattern, the lubrication being effected by means of wood fibre. The aperture for replenishing the oil is supplied with a spring cover.

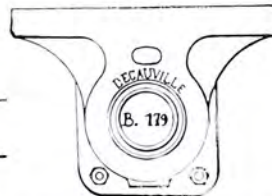
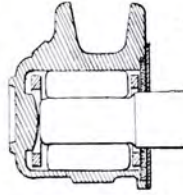
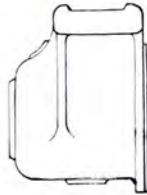
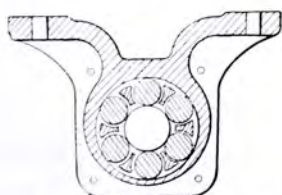
Type.	Diam. of Journal.	Type.	Diam. of Journal.	Type.	Diam. of journal.
B 112	1 in.	B 108	1 $\frac{1}{16}$ in.	B 125	2 $\frac{3}{16}$ in.
B 109	1 $\frac{3}{16}$ in.	B 115	1 $\frac{1}{4}$ in.	B 117	2 $\frac{1}{8}$ in.
B 107	1 $\frac{1}{2}$ in.	B 119	2 in.	B 114	2 $\frac{1}{4}$ in.

Roller Bearings (Patented).

Reduction of 70 per cent. in effort of traction.

The substitution of roller bearings for ordinary axle boxes has been desired for a long time because of the great reduction in the tractive force required and reduction in friction.

Several Types of bearings have already been constructed, but without giving the results hoped for because of faults in the design in the box itself. After having designed and tested several types, we are now able to offer an entirely new series of roller bearings, which have shown on careful trials to give an economy in traction of 70%. This result is due in the first place to the principle of the roller bearings, but specially to the arrangement of the rollers which assures their absolute parallelism without interfering with their freedom of rolling.



The bearing is absolutely dust-proof, as all the moving parts are hermetically closed in the box. In order to facilitate the substitution of roller bearings for ordinary axle boxes, we have retained the same dimensions for the upper part, distance apart of the bolt holes, height from centre, etc., so that the substitution can be easily made. There is a great reduction in the quantity of oil required for lubrication, and in some cases this may be omitted altogether, as for example for Wagons for kilns, etc., which are subjected to very high temperature. They are specially adapted for use on large Wagons, and we confidently recommend their use to our clients.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Wheels.

Diameter.	Chilled Iron.	Steel.	Diameter	Chilled Iron.	Steel.
3 ³ / ₁₆ inches.	Type R 46	—	12 inches.	—	Type R 93
4 ¹ / ₂ "	" R 45	—	12 ¹ / ₂ "	Type R 21	" R 89
5 ¹ / ₄ "	" R 44	—	15 ³ / ₄ inches, light pattern.	—	" R 86
7 ¹ / ₈ "	" R 51	—	15 ³ / ₄ " strong "	—	" R 88
9 ¹ / ₂ "	" R 50	Type R 31	17 ³ / ₈ " " "	—	" R 85
11 "	—	" R 30	19 ³ / ₈ " light "	—	" R 106
12 "	" R 18	" R 90	19 ³ / ₈ " strong "	—	" R 108

The wheels are pressed on to the axles by hydraulic pressure and require neither keys nor pins. Powerful screw press for putting on or taking off the wheels.

Steel Axles.

The axles are made of round steel the same diameter as the body of the axle, the journals being accurately turned down to size, suitable fillet arranged between one diameter and the other to avoid sharp angles.

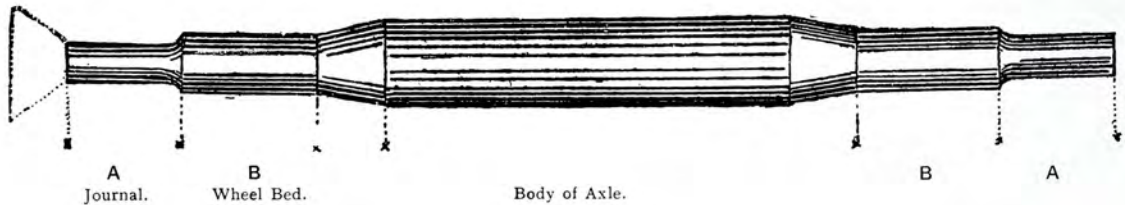


FIG. No. 723.

Diameter of Journal. A	Diameter of Wheel Bed. B	Diameter of Body. C	Designed to Carry.	Type of Axle Box.
1 inch.	1 ⁵ / ₁₆ inch.	1 ¹ / ₂ inch.	6 cwts.	B 2
1 ¹ / ₈ "	1 ³ / ₈ "	1 ³ / ₈ "	6 "	B 112
1 ¹ / ₄ "	1 ¹ / ₂ "	1 ³ / ₈ "	8 ¹ / ₂ "	B 3
1 ³ / ₈ "	1 ⁷ / ₈ "	1 ³ / ₈ "	8 ¹ / ₂ "	B 109
1 ¹ / ₂ "	1 ⁷ / ₈ "	1 ³ / ₈ "	12 "	B 4
1 ⁵ / ₈ "	1 ⁷ / ₈ "	1 ³ / ₈ "	12 "	B 107
1 ⁵ / ₈ "	2 ¹ / ₈ "	2 "	1 ton.	B 108
2 "	2 ¹ / ₄ "	2 ¹ / ₈ "	1 ¹ / ₂ "	B 115

Standards and Pushing Bars.

- Standards for Wagons, Type No. 19.
- " " " Nos. 20, 21, 22.
- " " " Nos. 23, 24.
- " " " Nos. 25, 25 B, 25 C, 26 B.
- " " " Nos. 25 F, G, H, I, N, K, L, M, O.
- " " " Nos. 26 C, 26 G.
- " " " No. 26 E.
- " " " No. 26 H.

- Pushing Bar for Types 27, with bolts.
- Two Angle-iron Uprights for Types 29, with bolts.
- Two Angle-iron Uprights, with pushing bars and sheet-iron sides, for Types 31.

Tipping Boxes.

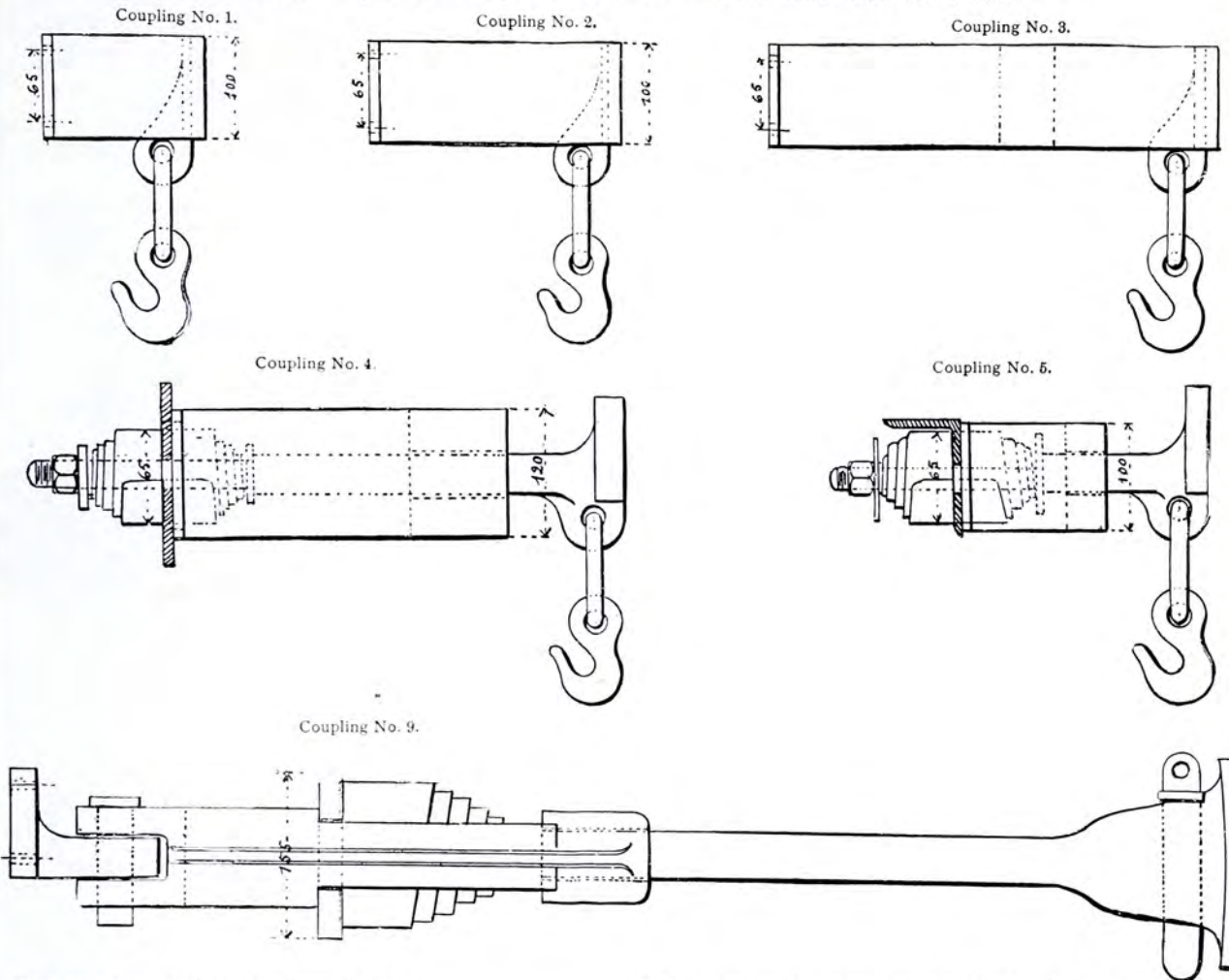
<table style="width: 100%;"> <thead> <tr> <th>Type.</th> <th>Capacity.</th> </tr> </thead> <tbody> <tr> <td>No. 19 ..</td> <td>7¹/₂ cubic feet</td> </tr> <tr> <td>" 20 ..</td> <td>9 "</td> </tr> <tr> <td>" 21 ..</td> <td>11 "</td> </tr> <tr> <td>" 22 ..</td> <td>11 "</td> </tr> <tr> <td>" 23 ..</td> <td>13 "</td> </tr> <tr> <td>" 24 ..</td> <td>15 "</td> </tr> <tr> <td>" 24 B ..</td> <td>15 " light pattern.</td> </tr> <tr> <td>" 25 ..</td> <td>18 " strong "</td> </tr> </tbody> </table>	Type.	Capacity.	No. 19 ..	7 ¹ / ₂ cubic feet	" 20 ..	9 "	" 21 ..	11 "	" 22 ..	11 "	" 23 ..	13 "	" 24 ..	15 "	" 24 B ..	15 " light pattern.	" 25 ..	18 " strong "	<table style="width: 100%;"> <thead> <tr> <th>Type.</th> <th>Capacity.</th> </tr> </thead> <tbody> <tr> <td>No. 25 F ..</td> <td>18 cubic feet</td> </tr> <tr> <td>" 25 N ..</td> <td>18 "</td> </tr> <tr> <td>" 26 ..</td> <td>22 "</td> </tr> <tr> <td>" 26 C ..</td> <td>36 "</td> </tr> <tr> <td>" 26 D ..</td> <td>58 "</td> </tr> <tr> <td>" 26 E ..</td> <td>27 "</td> </tr> <tr> <td>" 26 G ..</td> <td>27 "</td> </tr> <tr> <td>" 26 H ..</td> <td>36 "</td> </tr> </tbody> </table>	Type.	Capacity.	No. 25 F ..	18 cubic feet	" 25 N ..	18 "	" 26 ..	22 "	" 26 C ..	36 "	" 26 D ..	58 "	" 26 E ..	27 "	" 26 G ..	27 "	" 26 H ..	36 "
Type.	Capacity.																																				
No. 19 ..	7 ¹ / ₂ cubic feet																																				
" 20 ..	9 "																																				
" 21 ..	11 "																																				
" 22 ..	11 "																																				
" 23 ..	13 "																																				
" 24 ..	15 "																																				
" 24 B ..	15 " light pattern.																																				
" 25 ..	18 " strong "																																				
Type.	Capacity.																																				
No. 25 F ..	18 cubic feet																																				
" 25 N ..	18 "																																				
" 26 ..	22 "																																				
" 26 C ..	36 "																																				
" 26 D ..	58 "																																				
" 26 E ..	27 "																																				
" 26 G ..	27 "																																				
" 26 H ..	36 "																																				

"DECAUVILLE" Portable and Narrow Gauge Railway.

Couplings and Buffers.

Buffer and couplings for wagons Type No. 2. Ordinary buffer (without bolts). Coupling No. 1.
 Ordinary buffer (without bolts). Coupling No. 2. Extended buffer (without bolts). Coupling No. 3
 Spring buffer, small type for wagons, Types 25 and under (without bolts). Coupling No. 4, springs RS 1.
 Spring buffer, same, but strengthened for wagons Types 26 and above (without bolts). Coupling No. 4,
 spring RS 38.
 Spring buffers, large type (without bolts), coupling No. 5, spring RS 1.
 Spring RS 38, for Types 26 and above.
 Spring "buffer for gauges of 24 in. and 30 in., coupling No. 9 without coupling piece.

NOTE.—Buffers are always delivered without Bolts unless otherwise ordered.



Spiral spring RS 1 for above buffers.

" " RS 38 " "

Bolts, $\frac{1}{2}$ -inch diameter for axle boxes.

" $\frac{1}{2}$ -inch " for standards, Types 20 and 22.

" $\frac{1}{2}$ -inch " for pushing bars.

Bolts, $\frac{5}{8}$ -inch diameter for standards, Type 25.

" $\frac{1}{2}$ -inch " for ordinary buffers.

" $\frac{1}{2}$ -inch " for spring buffers.

" $\frac{5}{8}$ -inch " for large size axle boxes.

Crane Hooks, Sockets, Etc.

Hooks for lifting tipping box by crane.

Hooks with palms for riveting to wagon bodies for the same purpose as above.

Hook and ring for preventing wagon bodies from tipping, for wagons up to 22 cubic feet.

Ditto, do. for wagons above 22 cubic feet.

Sockets for uprights for platform wagons (without bolts). Eye bolt with hook and ring

Chain traces 14 ft. 10 in. long, for horse traction. Ditto, do. for two horses.

"DECAUVILLE" Portable and Narrow Gauge Railway.

WEIGHBRIDGES.

To Weigh from 1 to 30 Tons.

As we are frequently called upon when installing complete plants to supply Weighing Machines, we have made arrangements with the best-known makers to supply any type of Weighing Machine that may be required. We can supply all types of Weighing Machines with wheel-rutted tables to suit the various gauges of our track, the advantage being that these Weighing Machines can be fixed flush with the floor.

All Machines are carefully tested at the works before delivery, and we can consequently give the same guarantee for them as for our own track and rolling-stock. We specially recommend Types 21 and 22 which have been specially designed for weighing two small wagons, Type 11 or 25, at a time, or a large wagon, Type 65 or 66. Although they are constructed to weigh up to 8 tons, the weight is accurate for two tons or less, and the wear and tear of a machine is always less on a machine that is above the strength required than upon one whose limit is near the weight usually handled.

NOTE.—Prices of Weighing Machines and Weighbridges are the same for any gauge of track.

Type 1.—Portable Weighing Machine to weigh up to 1 ton, constructed entirely of metal, and fitted with movable rails.

Type 2.—The same, but with double steel-yard, dispensing with movable weights, which are liable to get lost. Steel plate box foundation for setting machine level with the floor.

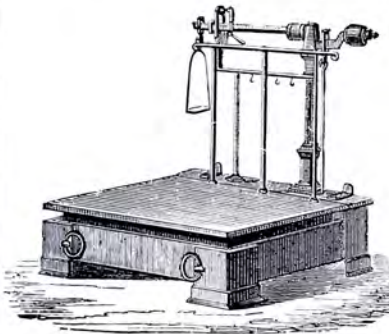


FIG. No. 724. Type 1.

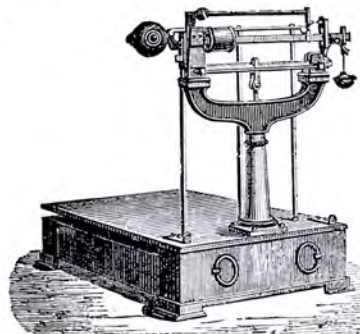


FIG. No. 725. Type 2.

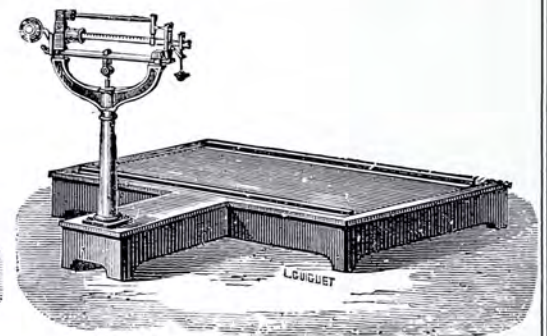


FIG. No. 726. Types 11, 12 and 13.

Type 11.—Weighbridge to weigh up to 1 ton, entirely of metal, with cast-iron foundation in one piece, and double steel yard. Table 3 ft. 9 $\frac{1}{4}$ in. \times 3 ft. 1 $\frac{3}{8}$ in.

Type 12.—To weigh up to 1 $\frac{1}{2}$ tons. Table 3 ft. 9 $\frac{1}{4}$ in. by 3 ft. 4 $\frac{3}{8}$ in.

Type 13.— " " " 4 ft. 11 in. by 3 ft. 4 $\frac{3}{8}$ in.

Type 14.— " 2 tons. " 4 ft. 11 in. by 3 ft. 3 $\frac{3}{8}$ in.

Type 15.— " " " 5 ft. 11 in. by 3 ft. 11 $\frac{1}{4}$ in.

Type 16.— " 3 tons. " 4 ft. 11 in. by 3 ft. 3 $\frac{3}{8}$ in.

Type 17.— " " " 5 ft. 11 in. by 3 ft. 11 $\frac{1}{4}$ in.

Type 18.— " 4 tons. " 4 ft. 11 in. by 3 ft. 3 $\frac{3}{8}$ in.

Type 19.— " " " 5 ft. 11 in. by 3 ft. 11 $\frac{1}{4}$ in.

Type 21.— " 8 tons. " 13 ft. 1 $\frac{1}{2}$ in. by 3 ft. 3 $\frac{3}{8}$ in.

With cast-iron foundation, steel-yard column, 6 ft. 6 $\frac{3}{4}$ in. from the centre of the track.

Type 22.—Same as Type 21, but with table 16 ft. 4 $\frac{3}{8}$ in. by 3 ft. 3 $\frac{3}{8}$ in.

Type 23.—To weigh up to 10 tons, with table 16 ft. 4 $\frac{3}{8}$ by 8 ft. 2 $\frac{3}{8}$ in.

Cast-iron foundation, steel-yard column, 9 ft. $\frac{1}{4}$ in. from the centre of the track.

Type 24.—To weigh up to 30 tons. Table 18 ft. $\frac{1}{2}$ in. by 5 ft. 7 in.

Cast-iron foundation, steel-yard column, 11 ft. 2 in. from the centre of the track.

Wagon Weighbridge to weigh one ton, for weighing pig-iron, with apparatus for releasing the mechanism. Table, 5 ft. by 2 ft. 3 $\frac{1}{2}$ in. Platform, 1 ft. by 11 $\frac{1}{2}$ in.; and grating, 2 ft. by 7 $\frac{1}{2}$ in. The rails mounted on chilled-iron wheels 12 in. in diameter, for track of 1 ft. 7 $\frac{3}{4}$ in.

Extra for graduating steel yards in kilos.

NOTE.—A Weighbridge should have a weighing capacity a third greater than the heaviest load it is to receive.

"DECAUVILLE" Portable and Narrow Gauge Railway.

WEIGHBRIDGES—(continued.)

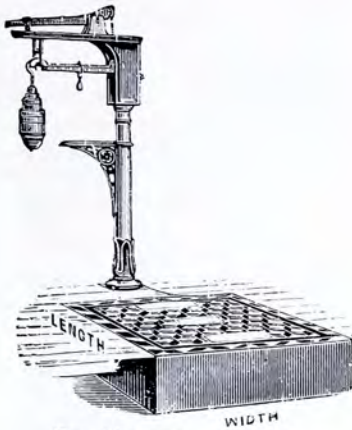
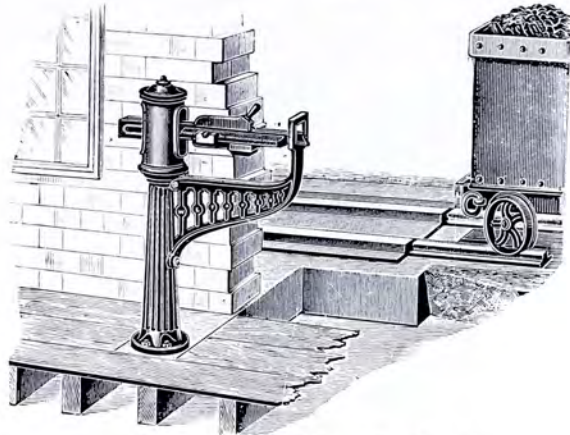


FIG. No. 727. Class 2.

Dormant Platform Weighing Machine with **Pattern A Pillar and Steelyard** (with loose weights).

Platform ranging from 24 in. × 24 in. to 48 in. × 72 in.



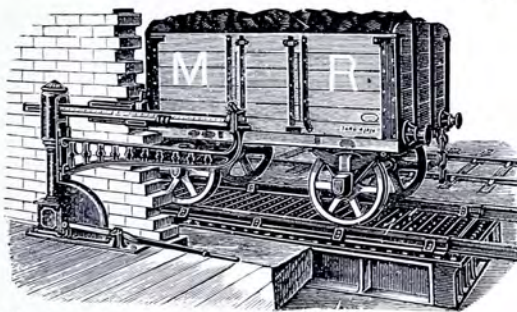
Pattern C. FIG. No. 728. Class 2.

Machine with **Improved Steelyard** (dispensing with loose weights).

Strong Machine made entirely of Iron, with smooth Platform with Rails cast on. Constructed on the three-lever principle, which allows the Platform to swing freely in the direction in which the trucks move, and thus prevents undue shock to the knife-edges.

If desired, can be supplied without Rails at same price.
To weigh ... 20 20 40 40-cwt.
Size of Platform 48 by 26 48 by 30 48 by 26 48 by 30 in.

This Machine can be fitted with Steelyard and loose weights as Pattern "A," or with improved Steelyard dispensing entirely with loose weights as Pattern "C," or with Patent Ticket Printing Steelyard to print the weight on tickets as Pattern "F."



Self-contained Truck Weighbridge. FIG. No. 729.

With improved Pillar and Steelyard, dispensing with loose weights, can be fitted with relieving Apparatus (as shown), if required.

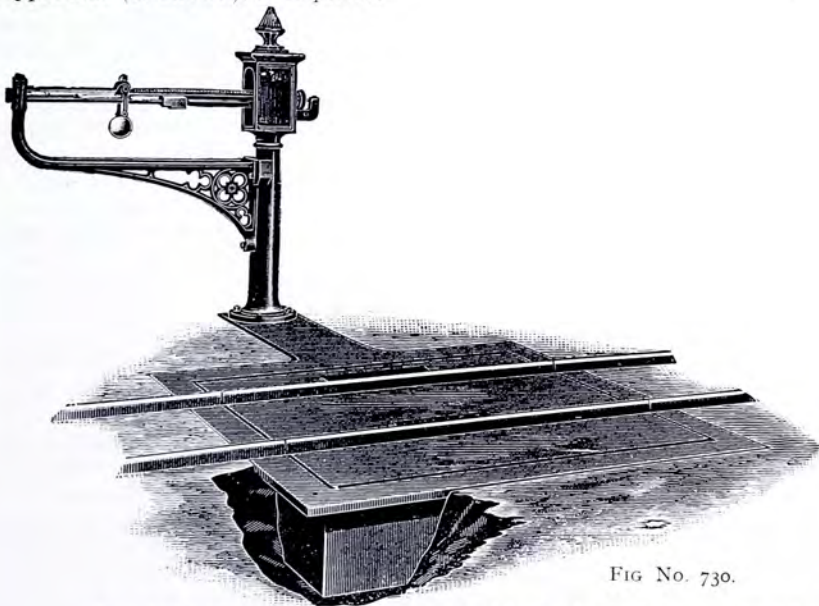


FIG No. 730.

Pit Bank Weighbridge Self-contained, with Rails cast on Plate, for Weighing Trucks at Collieries, Quarries, &c.; made especially strong to withstand rough usage.

This machine is arranged to dispense entirely with loose weights, the Steelyard being graduated up to the full capacity.

An additional Slide is provided for **Taring off the Weight of the Trucks.**

Made in the following sizes:—

Capacity. Tons.	Size of Platform.			
	ft.	in.	ft.	in.
2 ...	4	0	by	2 2
2 ...	4	0	by	3 6
3 ...	5	0	by	4 0

The Weighbridges can be fitted with Sunk Rails instead of Raised Rails, or without Rails.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Portable Bridges.

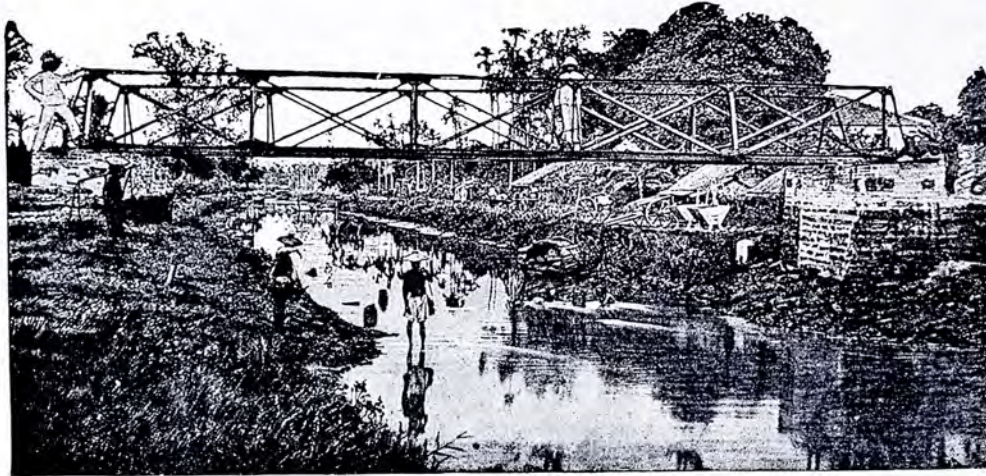
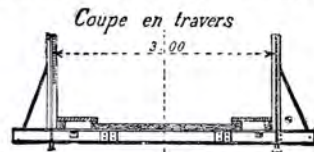
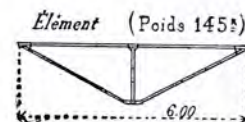


FIG. No. 731. Photograph of a 21 metre bridge at Phu-Lam (Cochin China).

NUMEROUS clients have asked us for steel bridges to cross rivers in the Colonies. In order to meet these enquiries satisfactorily and avoid special calculations for every bridge, and sending workmen to put them up, we have adopted portable and dismantlable bridges, of which all the parts are similar, and can be used equally for a bridge of 20 metres or a bridge of 300 metres.



Cross Section.



Structure weighing 145 kls.

THE ADVANTAGES OF PORTABLE BRIDGES ARE AS FOLLOWS:—

1. The use of steel, having double the strength of iron, which allows a considerable reduction in the weight of the bridges.
2. The number of the different parts entering into the construction of the bridges being very small, and the weight of the heaviest pieces also relatively small, they can easily be put together on the spot with bolts, and similarly the bridges can be dismantled and replaced elsewhere with the greatest facility.
3. The form and dimensions of all parts remain the same, for bridges of any length the number of parts only vary. For lengths of even number, say 6, 12, 18 metres, the terminals are identical, but for odd number lengths, such as 9, 15, 21 metres, two bearings are on the right and two on the left. To simplify this little difference a type of bearing has been provided which can be transformed on the spot into right or left bearings, so that they can be used for odd and even lengths.
4. Notwithstanding the putting together by bolts, these bridges offer the same rigidity as if they were rivetted, for all the joints are not crossed.
5. The building up of these bridges is carried out with the greatest facility, & without special installation.

GENERAL INFORMATION.

WE construct various types of bridges appropriated to different requirements.

1. Footway for foot passengers of 1 m.63 centimetres clear width.

THIS bridge may serve for foot passengers or animals, and can be used for Trucks or Wagons not exceeding 1 ton in weight and 2 metres in length. For each length of 16 metres and below, the uniform load is 300 kilos per square metre, or 500 kilos per running metre.

2. A bridge (Type 6) to carry, with a maximum span of 21 metres, either a load uniformly distributed of 250 kilos. per square metre, or 750 kilos. per running metre of bridge, either a cart weighing 4 tons or a train of Wagons, each 1 m.80 in length and weighing 1,350 kilos. When the span is less than 21 metres the load cannot be increased, but a load equally distributed can increase to a maximum of 400 kilos. per square metre, or 1,200 kilos. per running metre for each 12 metre span and below.

"DECAUVILLE" Portable and Narrow Gauge Railway.

The increase of the load uniformly distributed is such that between 12 and 21 metre spans the total weight sustained by the bridge is 16 tons.

The maximum span is 21 metres and can vary by lengths of 3 metres.

3. The bridge (Type 6 bis) similar to Type 6, but of greater strength, and sustaining a cart of 6 tons with its equipage, or a 6 tons locomotive drawing trucks weighing 900 kilos. per running metre, or a load uniformly distributed of 300 kilos. per square metre, equal 900 kilos. per running metre.

4. A bridge (Type 6 ter) similar to the two preceding, but still stronger, allowing 24 metres, the maximum span, and able to carry a 12 ton locomotive drawing a train of trucks. The span to this bridge may vary by lengths of 2 metres.

5. A road bridge of 4m. 20 wide in the clear with balustrades covered with corrugated iron to hold ordinary ballasts.

This bridge is constructed for a maximum span of 18 metres, and can support a string of carts 6 tons per axle, or 8 tons on 2 axles, or else 2 strings of carts carrying 4 tons per axle or 6 tons per 2 axles, equal to a load uniformly distributed of 400 kilos. per square metre, and 1,600 kilos. per running metre.

A span of this bridge may vary by lengths of 2 metres.

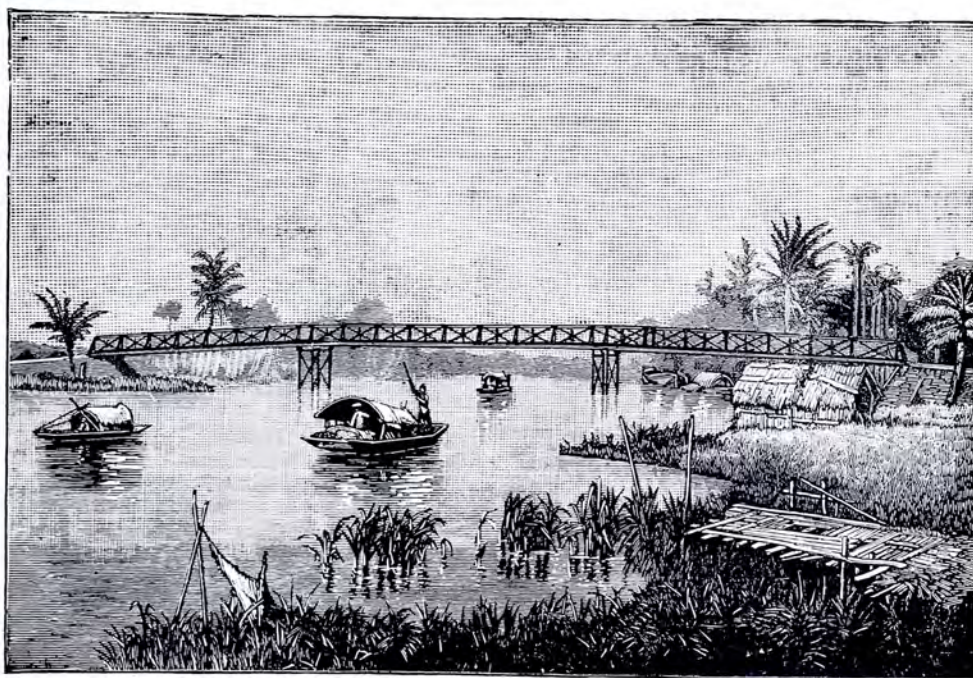


FIG. No. 732.

We now recapitulate in the following table the various particulars concerning these types of bridges.

	Footway.	Bridge Type 6.	Bridge Type 6 bis.	Bridge Type 6 ter.	Road Bridge.
Clear width between the parapets	1m. 63	3m.	3m.	3m.	4m. 20
Material of the balustrades	wood	wood	wood		corrugat- ed iron
Maximum span or distance between the supports	16m.	21m.	21m.	24m.	18m.
Variations in lengths by multiples of metres	2m.	3m.	3m.	2m.	2m.
Maximum length that can be constructed	4m.	6m.	6m.	4m.	4m.
Total maximum load	8,000k.	16,000k.	19,000k.	24,000k.	29,000k.
Maximum moving load for any span	1,000k.	4,000k.	6,000k.	12,000k.	8,000k.
Load equally distributed per square metre with maximum span	300k.	250k.	300k.	350k.	400k.
Load equally distributed per running metre with maximum span	500k.	750k.	900k.	1,000k.	1,600k.
Maximum length for maximum load	16m.	12m.	12m.	12m.	18m.
Average weight of the bridge per running metre	100k.	280k.	320k.	525k.	923k.
Weight of heaviest elements	55k.	145k.	162k.	207k.	250k.
Length of longest element	4m.	6m.	6m.	4m. 24	5m. 40

Use of the "Decauville" Off-railer.

The Off-railer is composed of two pieces of forged iron, about 4 ft. long, and the same height as the "Decauville" Rail, but tapering down at one end. It is riveted up in one piece with sleepers and fish plates. When it is placed upon a line it allows the Wagons to run easily from the original track on to the new one, the direction of the Track can therefore be quickly and temporarily altered (to left or right) at any point. Branches can be made in any direction from the fixed Track without interrupting the traffic.

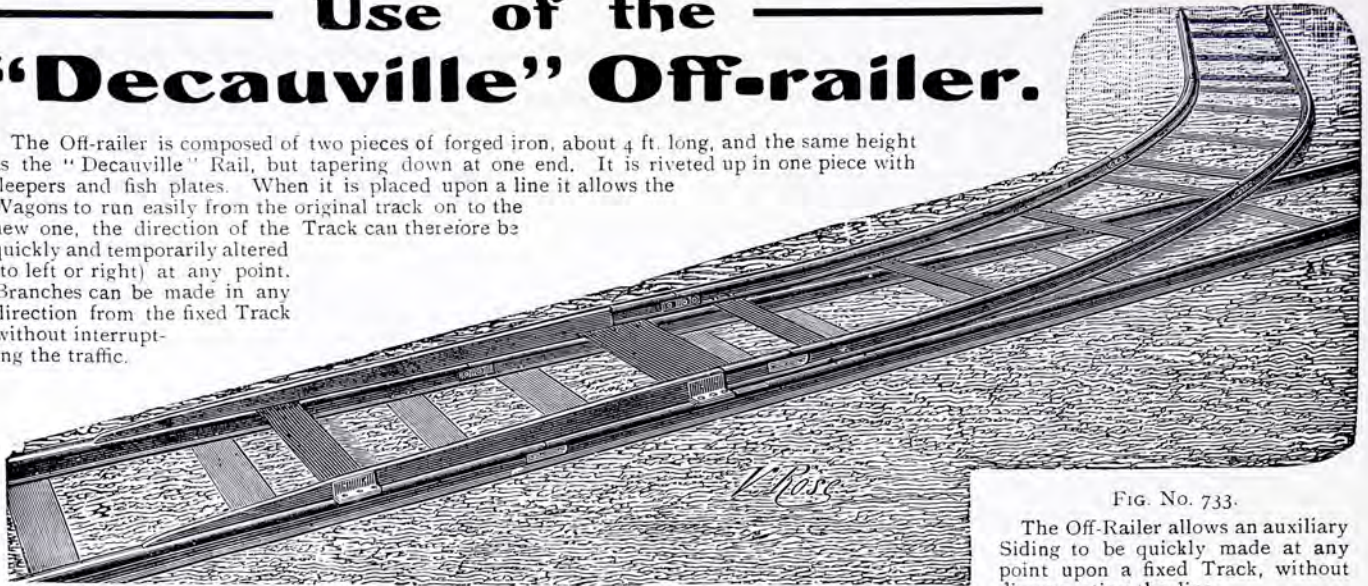


FIG. No. 733.

The Off-Railer allows an auxiliary Siding to be quickly made at any point upon a fixed Track, without disconnecting the line.

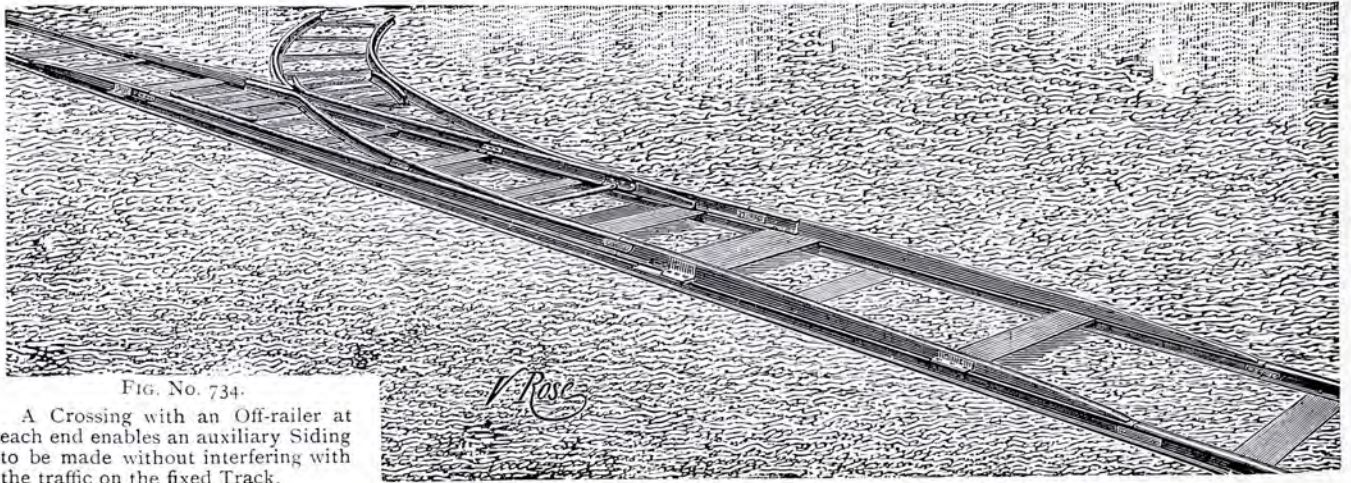


FIG. No. 734.

A Crossing with an Off-railer at each end enables an auxiliary Siding to be quickly made without interfering with the traffic on the fixed Track.

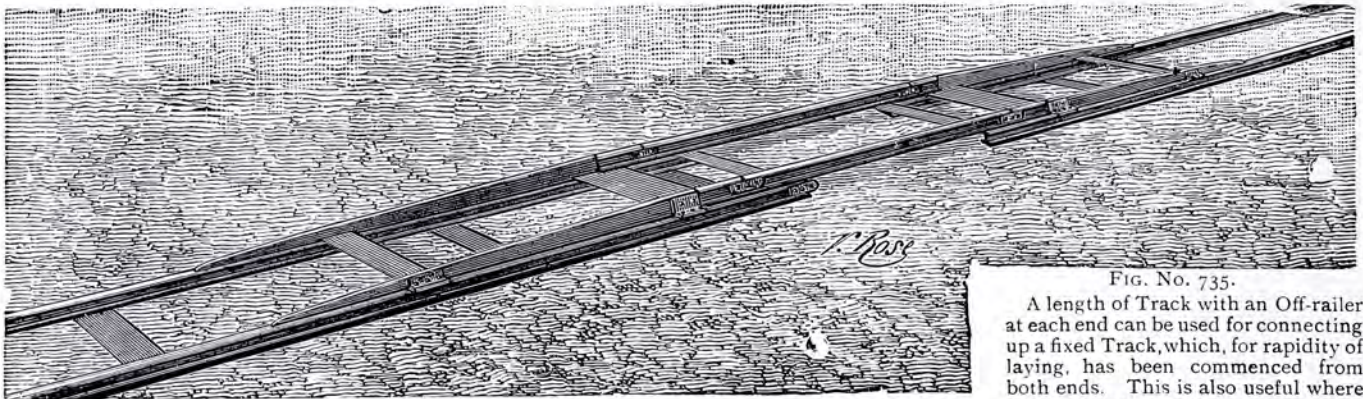


FIG. No. 735.

A length of Track with an Off-railer at each end can be used for connecting up a fixed Track, which, for rapidity of laying, has been commenced from both ends. This is also useful where the line is interrupted by a cross road.

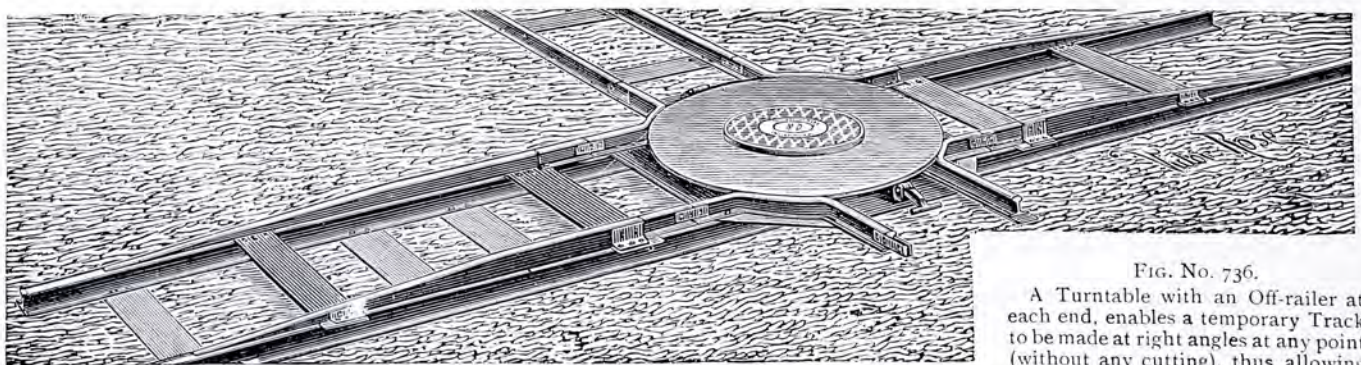


FIG. No. 736.

A Turntable with off-railer at each end, enables a temporary Track to be made at right angles at any point (without any cutting), thus allowing traffic to pass in four directions.

"DECAUVILLE" Portable and Narrow Gauge Railway.

LOCOMOTIVES.

Locomotive Type No. 1.

3 Tons 5 Cwts. empty (4 Tons 15 Cwts. loaded).

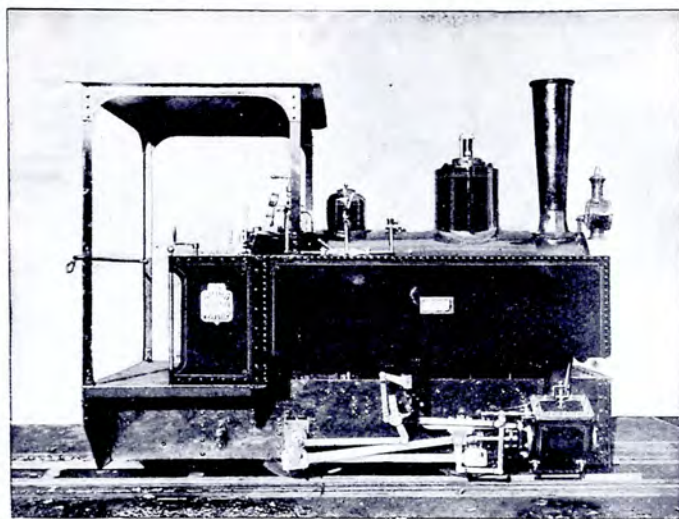


FIG. No. 737.

Weight empty	3 tons 5 cwts.
Weight fully loaded	4 tons 15 cwts.
Weight, average working	4 tons.
Traction power $F = \frac{Kpd^2 L}{D}$	1254 lbs.
K.—Coefficient of useful power	0.65.
p.—Pressure of steam in boiler	170 lbs.
d.—Diameter of cylinder	5 $\frac{3}{8}$ inches
L.—Stroke	8 inches.
D.—Diameter of wheels	20.0 inches.
Grate area	2 square feet.
Fire-box area	12 feet 7 inches.
Tube area	54 feet 9 inches.
Total heating surface	67 feet 6 inches.
Wheel base	2 feet 9 $\frac{1}{2}$ inches.
Coupled wheels	No. 2.
Capacity of water tanks	106 gallons.
Capacity for fuel (in briquettes)	100.
Speed at maximum load	5 $\frac{1}{2}$ miles per hour.
Speed at average load	8 $\frac{1}{2}$ miles per hour.
Water consumption per mile	7.4 gallons.
Fuel consumption per mile	60 lbs.
Range with full load of fuel and water	11 miles.
Lightest type of track allowable	No. 7.
Minimum radius of curves	33 feet.
Outside dimensions:—Length 11 ft. 6 ins., width 5 ft., height 8 ft.	

NOTE.—All the figures given relate only to a track of 2 ft. gauge.

LOCOMOTIVE with copper fire-box, to burn coal or wood, brass tubes, driver's cab, screw brake, spark arrester, two injectors, a large headlight or reflector, gauge glass lamp and tools, viz.: a pricker, 2 double spanners to take 4 sizes of nuts, a shifting spanner, a drift, an oil feeder, and a coal-shovel.

TENDER to hold 330 gallons of water and 10 cwts. of coal.

NOTE.—According to rule, the locomotives must be approved and taken over by customers or their representatives before they leave the Works.

To procure spare parts state the name and the Works number of the Locomotive. We construct these Locomotives for gauges from half a metre (1 ft. 7 $\frac{3}{8}$ ins.) to one metre (3 ft. 3 $\frac{3}{8}$ ins.) All our Locomotives can be adapted to burn either lampant petrol, or tar oils.

TRAIN LOADS.

Exclusive of engine, on different grades, at different speeds, the resistance being taken at 22 lbs. per ton.

GRADES.	At a speed of 5 $\frac{1}{2}$ miles an hour.		At a speed of 8 $\frac{1}{2}$ miles an hour.	
	Tons.	Cwts.	Tons.	Cwts.
On the level	47	0	40	0
1 in 200	30	0	24	0
1 in 100	22	4	18	0
1 in 50	12	16	10	0
1 in 40	10	10	9	0
1 in 25	6	10	—	—
1 in 20	5	0	—	—

“DECAUVILLE” Portable and Narrow Gauge Railway.

Locomotive Type No. 3.

5 Tons empty (6 Tons 10 Cwts. loaded).

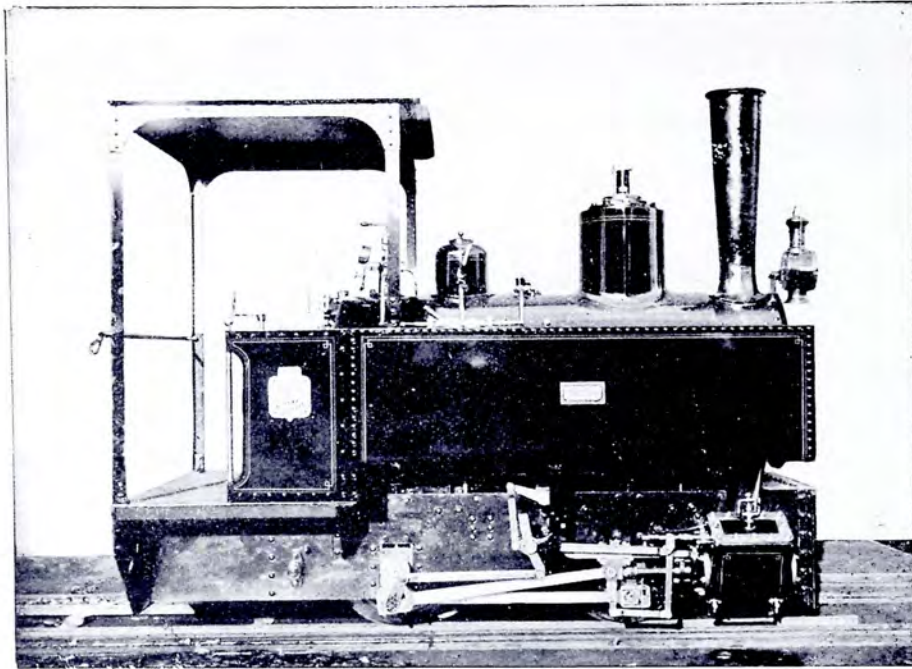


FIG. No. 738.

Weight empty	5 tons.
Weight fully loaded	6 tons 10 cwts.
Weight average working	5 tons 13 cwts.
Traction power $F = \frac{Kpd^2}{L}$	1933 lbs.
D	
K.—Coefficient of useful power	0.65.
p.—Pressure of steam in boiler	170 lbs.
d.—Diameter of cylinder	6½ inch.
L.—Stroke	9.84 inch.
D.—Diameter of wheels	23.62 inch.
Grate area	3.5 square feet.
Fire-box area	17.0 square feet.
Tube area	105.6 square feet.
Total heating surface	122.6 square feet.
Wheel base	43.3 inch.
Coupled wheels	No. 2.
Capacity of water tanks	187 gallons.
Capacity of coal-box	4 cwt.
Speed at maximum load	5½ miles per hour.
Speed at average load	8.7 miles per hour.
Water consumption per mile	6.6 gallons.
Fuel consumption per mile	8½ lbs.
Range with full load of fuel and water	12.4 miles.
Lightest type of Track allowed	No. 9.
Minimum radius of curves	49 feet.
Outside dimensions:—Length 11 ft. 6 ins., width 5 ft. 8 ins., height 8 ft. 4½ ins.	

NOTE.—All the figures given relate only to a Track of 2 feet gauge.

LOCOMOTIVE with copper fire-box, to burn coal or wood, driver's cab, screw brake, spark arrester, 2 injectors, a large head light or reflector, a gauge glass lamp and tools, viz.:—a pricker, two double spanners to take four sizes of nuts, a shifting spanner, a drift, an oil-feeder, and a coal shovel.

TENDER to hold 418 gallons water and 5 cwts. of coal.

NOTE.—According to rule the Locomotives must be approved and taken over by customers or their representative before they leave the Works.

To procure spare parts mention the name and Works number of Locomotive.

We construct these Engines for gauges from half a metre (1 ft. 7½ ins.) to one metre (3 ft. 3¾ ins.)

All our Locomotives can be adapted to burn either lampant petrol or tar oils.

TRAIN LOADS.

Exclusive of Engine on different grades, at different speeds, the resistance being taken at 22 lbs. per ton.

GRADES.	At a Speed of 5¼ miles an hour.		At a Speed of 8½ miles an hour.	
	Tons.	Cwts.	Tons.	Cwts.
On the level.	72	4	61	18
1 in 200	46	10	39	12
1 in 100	33	12	28	8
1 in 75	25	16	21	16
1 in 50	20	14	17	6
1 in 40	17	0	14	2
1 in 30	12	2	9	16
1 in 25	10	8	8	8
1 in 20	7	18	6	2
1 in 14	4	4	3	12

"DECAUVILLE" Portable and Narrow Gauge Railway.

Locomotive Type No. 6.

7 Tons 10 Cwts. empty (9 Tons 15 Cwts. loaded.) Two Axles coupled and one Axle radial.

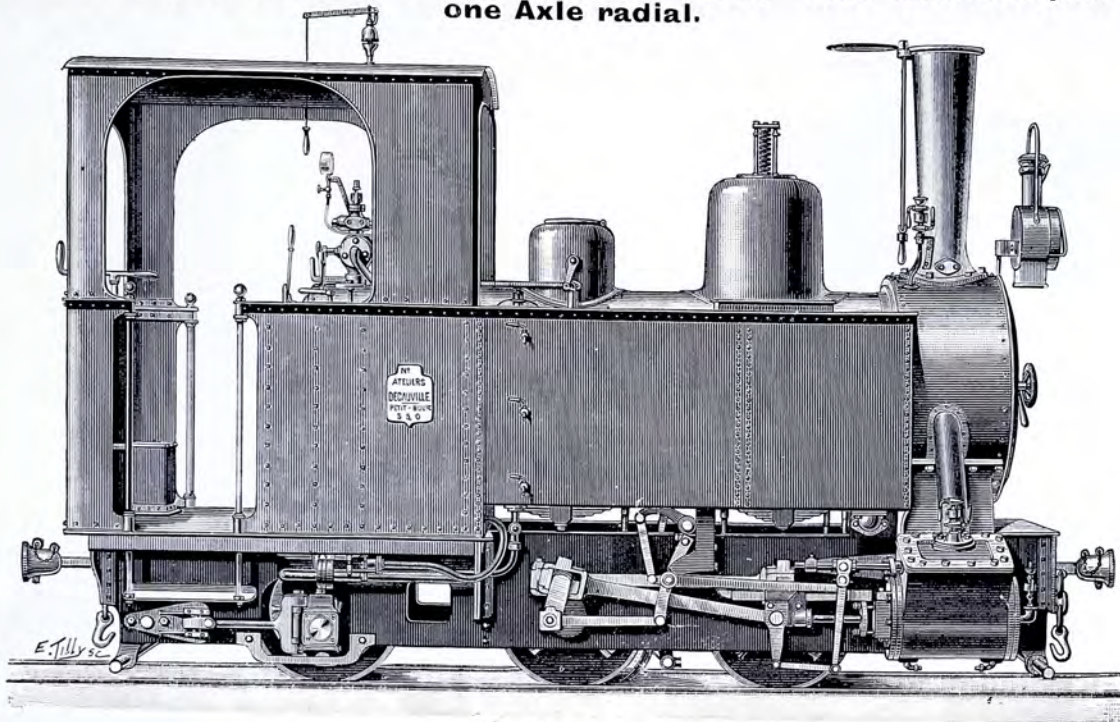


FIG. No. 739.

Weight empty	7 tons 10 cwts.
.. fully loaded	9 tons 15 cwts.
.. average working	8 tons 12 cwts.
Traction power $F = Kpd \cdot \frac{2}{L}$	= 3792 lbs.

D

K.—Co-efficient of useful power	0.65
p.—Pressure of steam in boiler	170 lbs.
d.—Diameter cylinders	8½ inches
L.—Stroke	11.8 inches
D.—Diameter of coupled wheels	23.6 inches
.. .. . Diameter of trailing radial wheels	19.7 inches
Grate area	4.15 square feet
Fire box area	23.7 " "
Tube area	159.3 " "
Total heating surface	183.0 " "
Wheel base of coupled axles	2 feet 11¾ inches
.. .. . total	6.2¾ inches
Coupled Wheels	No. 2
Capacity of water tanks	224½ gallons
.. .. . coal boxes	11 cwts.
Speed at maximum load	5.6 miles
.. .. . average load	7 miles
Water consumption per mile	8.6 gallons
Fuel	12.1 lbs.
Range with full load of fuel and water	16.8 miles
Lightest type of track allowable	No. 10
Minimum radius of curves	49.2 feet
Outside dimensions: length 15 feet; with 2 feet gauge, width 6 feet 1 inch; with 2 feet 6 inch gauge, width 6 feet 7 inches; height 9 feet 4 inches.	

NOTE.— All the figures given relate only to a track of 2 feet gauge.

LOCOMOTIVE with copper fire box, to burn coal or wood, brass tubes, driver's cab, screw brake, spark arrester, 2 injectors, a large head light or reflector, a gauge glass lamp, and tools, viz., a pricker, 2 double spanners to take four sizes of nuts, a shifting spanner, a drift, an oil feeder, and a coal shovel.

TENDER to hold 550 gallons of water and 16 cwt. of coal.

NOTE.—According to rule, the Locomotives must be approved and taken over by customers or their representatives before they leave the Works. To procure spare parts, mention the name and the Works number of the Locomotive. We construct these engines for gauges from half a metre (1ft. 7½ins.) to one metre (3ft. 3¾in.) All our Locomotives can be adapted to burn either lampant petrol or tar oils.

TRAIN LOADS.

Exclusive of engine on different grades, at different speeds, the resistance being taken at 22 lbs. per ton.

GRADES.	At a speed of 5½ Miles an hour		At a speed of 7 Miles an hour.		At a speed of 11 Miles an hour.	
	Tons	Cwts.	Tons	Cwts.	Tons	Cwts.
On the level	155	0	135	0	121	0
1 in 200	100	0	90	0	75	0
1 in 100	78	0	61	0	54	0
1 in 75	58	0	49	0	47	0
1 in 50	42	0	40	0	33	0
1 in 40	35	0	33	0	26	0
1 in 25	20	0	19	0	16	0
1 in 20	15	16	14	16	12	0
1 in 14	9	8	8	8	—	—
1 in 12½	8	0	—	—	—	—

“DECAUVILLE” Portable and Narrow Gauge Railway.

Locomotive Type No. 8.

9 Tons empty (12 Tons loaded). Three coupled Axles (6 Wheels coupled).

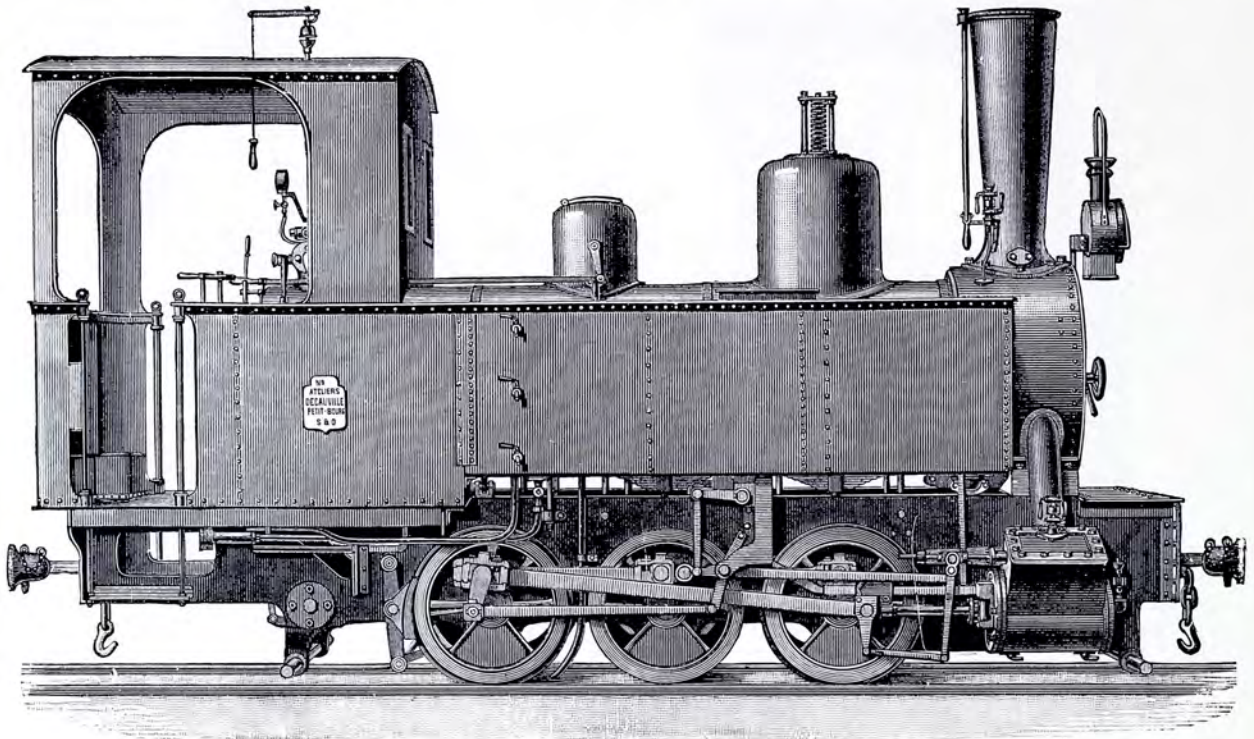


FIG. No. 740.

Weight, empty (about)	9 tons 0 cwt.
" fully loaded	12 tons 0 cwt.
" on drivers average working	10 tons 10 cwt.
Traction power	4255 lbs.
Pressure of steam in boiler	170 lbs.
Diameter of the cylinder	9 inches.
Stroke	12'6 inches.
Diameter of wheels	25'6 inches.
Total wheel base	5 feet 3 inches.
Fire-box area	25'8 square feet.
Tube area	171'2 " "
Total heating surface	197'0 " "
Grate area	5'6 " "
Capacity of water tanks	330 gallons.
" " coal boxes	12 cwt.
Minimum radius of curves	82 feet
" weight of rail	24 lbs.
Outside dimensions :—Length (exclusive of buffers)	14 feet 6½ inches
Width	6 feet 4 inches.
Height	8 feet 10 inches.

LOCOMOTIVE with copper fire-box, to burn coal or wood, brass tubes, driver's cab, centre buffers and couplings, side chains, screw brake, spark arrester, 2 injectors, a large head light or reflector, a gauge glass lamp and tools, viz. :—A pricker, 2 double spanners to take four sizes of nuts, a shifting spanner, a drift, an oil feeder and coal shovel.

NOTE.—According to rule, Locomotives must be approved and taken over by customers or their representatives before they leave the Works.

To procure spare parts, mention the name and the Works number of the Locomotive.

All our Locomotives can be adapted to burn either lampant petrol or tar oils.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Locomotive Type No. 10.

10 tons empty (13 tons 10 cwts. loaded). Three axles coupled and one axle radial.

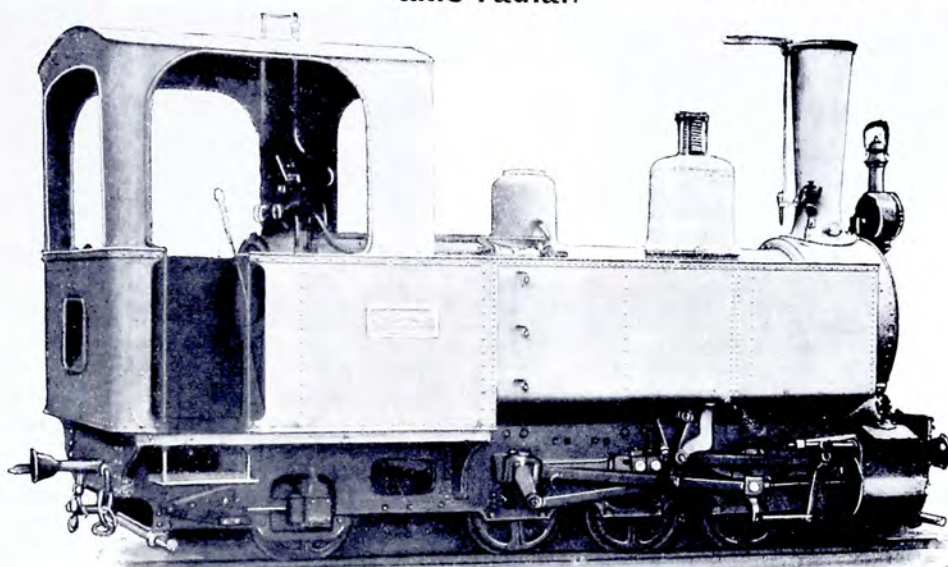


FIG. No. 741.

Weight empty	10 tons.
Weight fully loaded	13 tons 10 cwt.
Weight average working	12 tons 4 cwt.
Traction power $F = \frac{Kpd}{L}$	5269 lbs.

D	
K.—Co efficient of useful power	0.65.
p.—Pressure of steam in boiler	170 lbs.
d.—Diameter of cylinder	9.84 inches.
L.—Stroke	12.6 inches.
D.—Diameter of coupled wheels	25.6 inches.
Diameter of radial wheels	19.69 inches.
Grate area	6.24 square feet.
Fire-box area	22.00 " "
Tube area	210.1 " "
Total heating surface	232.1 " "
Wheel base of coupled wheels	4 feet 7 inches.
Total wheel base	8 feet 6 inches.
Capacity of water tanks	308 gallons.
Capacity of coal boxes	15 cwts.
Coupled wheels	No. 3.
Speed at maximum load	5½ miles.
Speed at average load	7½ miles.
Water consumption per mile	11½ gallons.
Fuel consumption per mile	16.3 lbs.
Lightest type of track allowable	No. 12.
Minimum radius of curves	82 feet.
Outside dimensions :—	
Length (exclusive of buffers)	16 feet 3½ inches.
Breadth	6 feet 5½ inches.
Height	10 feet 0½ inch.

NOTE.—All the figures given relate only to a track of 2 feet gauge.

TRAIN LOADS.

Exclusive of engine, at different speeds, and on different grades, the resistance being taken at 22 lbs. per ton.

Grades.	At a speed of 5 miles an hour.		At a speed of 7½ miles an hour.		At a speed of 13½ miles an hour.	
	Tons.	Cwts.	Tons.	Cwts.	Tons.	Cwts.
On the level.	240	0	205	0	157	0
1 in 200	156	0	132	10	100	0
1 in 100	114	0	96	10	72	10
1 in 75	89	0	75	0	55	14
1 in 50	72	0	60	10	44	10
1 in 40	60	0	50	0	36	8
1 in 25	38	10	31	10	22	0
1 in 20	30	0	24	6	16	4
1 in 14	19	12	15	6	9	6
1 in 12½	16	0	12	3	7	0

LOCOMOTIVE with copper fire-box to burn coal or wood, brass tubes, driver's cab, centre buffers and couplings, side chains, screw brake, spark arrester, two injectors, one large lantern or reflector, a gauge glass lamp and tools, viz.: a pricker, two double spanners to take four sizes of nuts, a shifting spanner, a drift, an oil feeder, and coal shovel.

TENDER to hold 528 gallons of water and 15 cwts. of coal.

NOTE.—According to rule, Locomotives must be approved and taken over by customers or their representatives before they leave the works.

To procure spare parts mention the name and the Works number of the Locomotive. All our Locomotives can be adapted to burn either lampant petrol or tar oil.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Railway Contractors & Goods Wagons. On Two Axles.

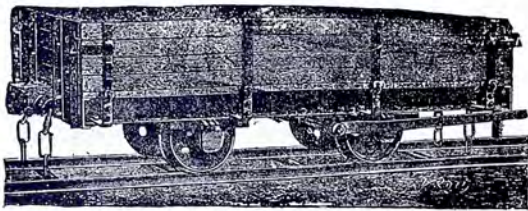


FIG. No. 742. Wagon Type P (closed), fitted with lever brake acting on 2 wheels.

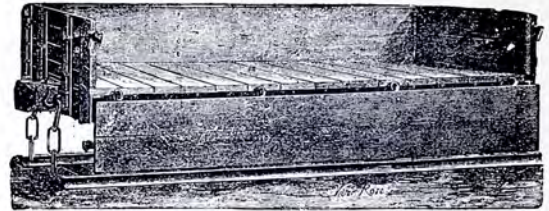


FIG. No. 743. Wagon Type P (open), both sides fitted to lower.

Wagon Type P—Ballast Wagon to carry 3 tons, oak platform and poplar wood sides, $15\frac{3}{4}$ in. deep, with hinged door at each side: underframe of steel channels $6\frac{3}{4}$ in. by 2 in.; mild steel axles $2\frac{3}{4}$ in. diameter, with journals 2 in. by 4 in., cast steel wheels, R 85, $15\frac{3}{4}$ in. diameter, oil axle boxes, Type B 119, without springs, wooden buffer strengthened with steel plate at one end, spring buffer at the other. Extreme length over couplings 11 ft. 10 in. Inside width, 4 ft. $8\frac{1}{4}$ in. Extreme outside width, 5 ft. 3 in. Cubic capacity, 60 cubic feet. Inside length, 9 ft. $7\frac{1}{2}$ in.

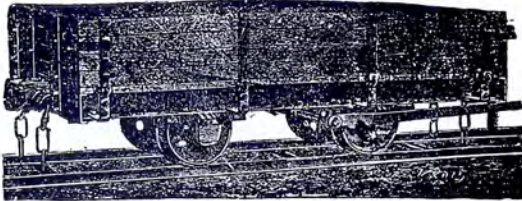


FIG. No. 744. Wagon Type PBA.

Type PBA—Same as above but with spring tulip buffer at each end, and safety chain for locomotive traction.

Type PA—Same as Type P, but with framework of steel channels $5\frac{1}{2}$ in. by 2 in., mounted on laminated springs with oil axle boxes, B 126.

Type PB—Same as Type PA, but with spring tulip buffers and safety chain for locomotive traction.

Lever brake acting upon 2 wheels, with wooden shoes.
Powerful screw brake acting on 4 wheels with cast iron shoes.

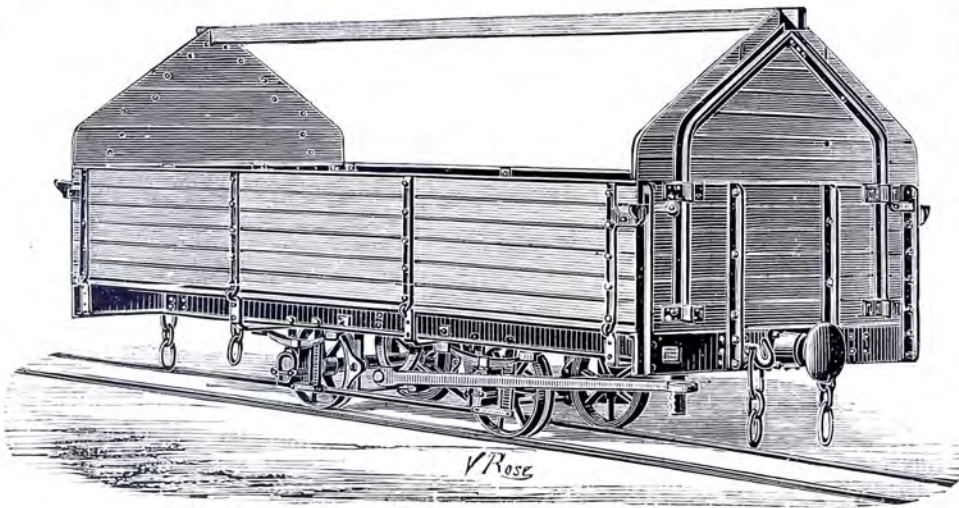


FIG. No. 745. Wagon Type PC, to carry 3 tons.

Type PC—To carry 3 tons, oak platform, sides and ends of poplar wood, hinged side doors, both ends fitted with supports, and wood beam to support tarpaulin, frame of channel steel, $5\frac{1}{2}$ in. by 2 in., mild steel axles $2\frac{3}{4}$ in. diam., journals 2 in. by 4 in., cast steel wheels, R 85, $17\frac{3}{4}$ in. diameter, oil axle boxes, B 126, mounted upon laminated springs, wooden buffer strengthened with steel plate at one end, spring buffer and coupling at the other. Extreme length over buffers, 15 ft. 5 in.; extreme width, 5 ft. 9 in.; inside length, 13 ft. 8 in.; inside width, 5 ft. 6 in.

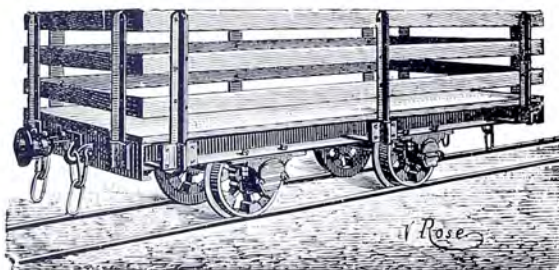


FIG. No. 746. Wagon Type PD, to carry 3 tons.

Type PCA—Same as above, but with a spring tulip buffer at each end and safety chain for locomotive traction.

Type PD—To carry 3 tons with oak platform and poplar wood body formed of battens fixed to steel supports 2 ft. deep, underframe of steel channels $6\frac{3}{4}$ in. by 2 in., mild steel axles $2\frac{3}{4}$ in. diameter, with journals 2 in. by 4 in., cast steel wheels, R 85, $17\frac{3}{4}$ in. diameter, oil axle boxes, B 119, without springs, wooden buffer at one end strengthened with steel plate, spring buffer at the other, with coupling hooks and chain. Extreme length over buffers, 11 ft. 6 in.; inside width, 4 ft. 8 in.; extreme width, 5 ft. 3 in.; capacity, 90 cubic feet; inside length, 9 ft. 6 in.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Type PDA—To carry three tons similar to Type PD, but with movable body formed of iron plate instead of poplar wood.

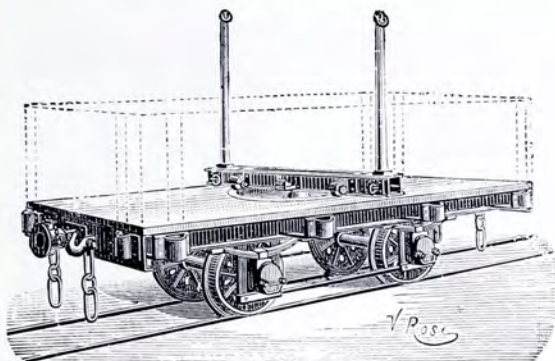


FIG. No. 747. Wagon Type PHA.

steel springs, oil axle boxes, B 126, mild steel axles $2\frac{3}{4}$ in. diameter, with journals 2 in. by 4 in., cast steel wheels, R 85, $17\frac{3}{4}$ in. diameter, tulip buffers with springs and safety chains for locomotive traction at both ends.

Extreme length over buffers, 11 ft. $5\frac{3}{4}$ in.
Outside width, 5 ft. 3 in.
Inside length, 9 ft. $8\frac{1}{4}$ in.

Type PHA—To carry three tons, wagon for transport of trees, or long lengths of wood or metal, oak platform, fitted with 12 sockets for uprights (four at each side and two at each end), and having a pivoting fork fitted with roller and roller path, channel steel underframe $5\frac{1}{2}$ in. by 2 in., mild steel axles $2\frac{3}{4}$ in. diameter with journals 2 in. by 4 in., cast steel wheels $17\frac{3}{4}$ in. diameter, R 85, oil axle boxes with laminated steel springs, tulip buffer with spring and safety chains for locomotive traction at both ends.

Pivoting fork only. Movable.

Type PKA—Platform Wagon to carry three tons for transport of pieces of machinery castings, etc., oak platform, movable poplar wood sides, 8 in. high, underframe of steel channels $5\frac{1}{2}$ in. by 2 in., laminated steel springs, oil axle boxes, B 126, mild steel axles $2\frac{3}{4}$ in. diameter, with journals 2 in. by 4 in., cast steel wheels, R 85, $17\frac{3}{4}$ in. diameter, tulip buffers with springs and safety chains for locomotive traction at both ends.

Inside width, 4 ft. $8\frac{1}{4}$ in.
Approximate weight, 22 cwts.
Capacity, 32 cubic feet.

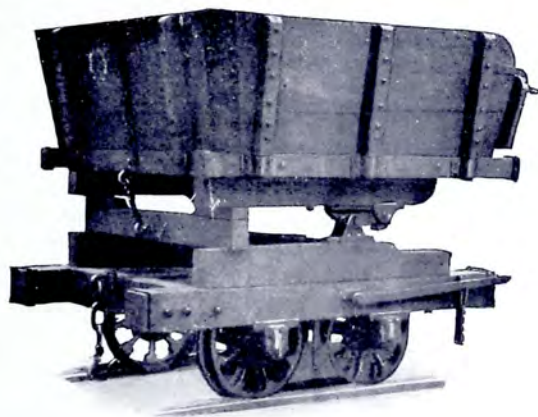


FIG. No. 748.

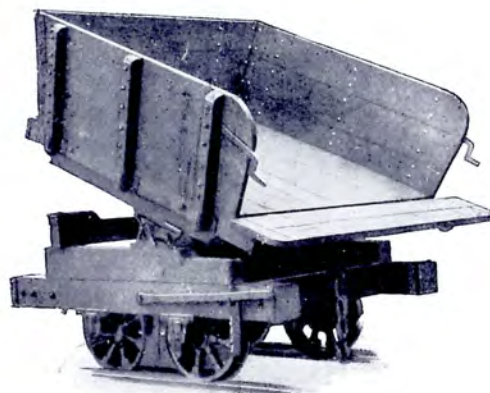


FIG. No. 749.

Ballast and Excavation Wagons "Girafes."

THESE wagons are specially designed for tracks of 3 ft. $3\frac{3}{8}$ in. to 4 ft. 11 in. gauge, of 72 to 108 cubic feet capacity. For tracks of 2 ft. to 2 ft. 6 in. gauge, cradle tipping wagons of 36 to 58 cubic feet capacity, as shown on page 40, figure 671, are specially recommended.

The double frame arrangement allows the body to be arranged to tip both end and side ways. The underframe and framework of the body are constructed of oak of the first quality, the sides of the body are of poplar wood, and the uprights of oak.

Couplings with central draw-bar, and coupling hooks and chains.

Mild steel axles, cast steel wheels 22 in. diameter (wheels of a less diameter are not suitable for this type of wagon). Oil axle boxes with renewable bearings.

24 in. Gauge.	Capacity 54 eubic feet.	3 ft. $3\frac{3}{8}$ in. Gauge.	72 cubic feet capacity.
" "	" 72 "	" "	90 " "
" "	" 90 "	4 ft. 9 in. "	90 " "
		" "	108 " "

NOTE—All these wagons can be fitted with brakes.

"DECAUVILLE" Portable and Narrow Gauge Railway.

Type M—Open Goods Wagon, to carry 3 tons, with wood underframe, laminated springs 2 ft. long, oil axle-boxes, Mild steel axles, $2\frac{3}{4}$ in. diameter in body, with journals 2 in. by 4 in., cast steel wheels 1 ft. $5\frac{3}{4}$ in. diameter, with tulip buffers and safety chains.

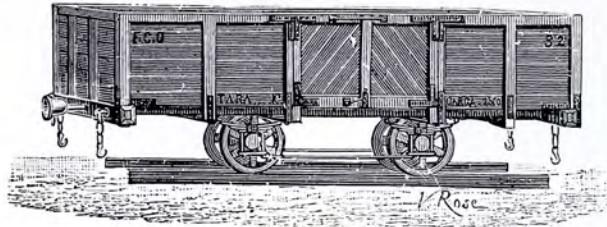


FIG. No. 750. Type M.

Extreme length over couplings	... 13 ft. 6 in.	Inside width	... 4 ft. 11 in.
„ outside width	... 5 ft. 7 in.	Approximate weight	... 18 cwt.
Inside length	... 11 ft. 4 in.	Capacity	... 4 cu. yds.

Open Goods Wagon to carry 5 tons, with oak platform, body of poplar wood, 1 ft. $7\frac{3}{4}$ in. deep, with flap doors at each side, underframe of channel steel, $6\frac{5}{8}$ in. by $2\frac{3}{8}$ in., mounted upon laminated steel springs, Mild steel axles $5\frac{1}{8}$ in. diameter, with journals $2\frac{3}{8}$ in. by $4\frac{3}{8}$ in., cast steel wheels 1 ft. $5\frac{3}{4}$ in., Type R 85, oil axle-boxes, Type B 187, fitted with hard brass renewable bearings, spring buffers and couplings at each end.



FIG. No. 751.

Extreme length over couplings	... 14 ft. 3 in.	Inside length	... 11 ft. 3 in.
„ outside length	... 5 ft. 9 in.	Inside width	... 5 ft. $0\frac{1}{2}$ in.

This Wagon is also made without ends and bars for tarpaulin.

Covered Goods Wagon, to carry 5 tons, with oak platform, body of poplar wood, iron door frames with sliding door at each side, underframe of channel steel $6\frac{5}{8}$ in. by $2\frac{3}{8}$ in., mounted on laminated steel springs, Mild steel axles, $3\frac{1}{8}$ in. diameter in body, with journals $2\frac{3}{8}$ in. by $4\frac{3}{8}$ in., cast steel wheels 1 ft. $5\frac{3}{4}$ in., Type R 85, oil axle-boxes, Type B 171, fitted with hard brass renewable bearings, spring buffer and couplings at each end.

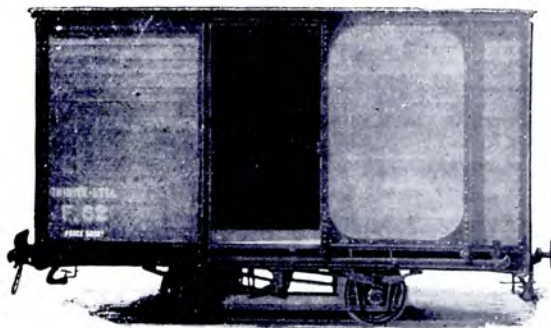


FIG. No. 752.

Extreme length over couplings	... 14 ft. 3 in.	Inside length	... 11 ft. $3\frac{5}{8}$ in.
„ outside width	... 5 ft. 11 in.	Inside width	... 5 ft. $0\frac{5}{8}$ in.

"DEGAUVILLE" Portable and Narrow Gauge Railway.

Passenger Carriages (on 2 axes).

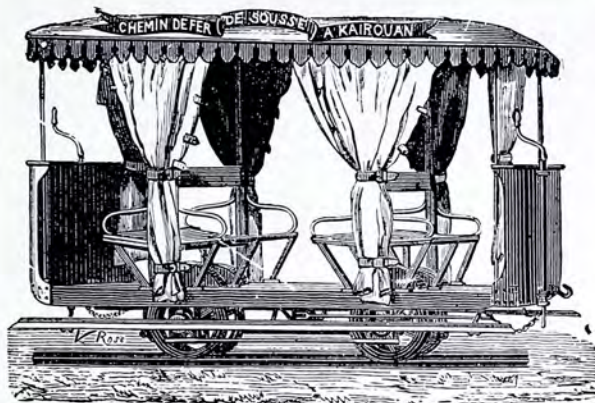


FIG. No. 753. Type H.

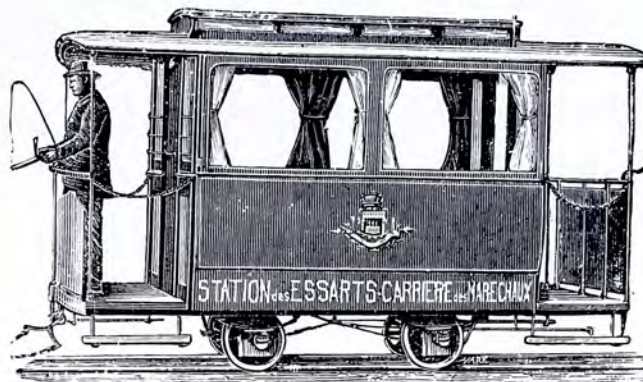


FIG. No. 754. Type I.

Type H—Open third class carriage with 2 bench seats (this type of carriage is that used in Antwerp and Versailles, and it is easily drawn by a light draught-horse).

This carriage has 16 inside seats and standing room for 4, and it is fitted with a brake worked from both ends, mounted upon wood underframe, with laminated steel springs, oil axle-boxes, Type B 124, fitted with hard brass renewable bearings, mild steel axles $2\frac{3}{4}$ in. diameter in body, with journals $1\frac{3}{4}$ in. by $3\frac{1}{2}$ in., cast steel wheels 1 ft. $5\frac{3}{4}$ in. diameter on the treads, car fitted with cloth curtains, spring buffer and couplings for horse traction.

Extreme length over couplings, 11 ft. $9\frac{3}{4}$ in.

Extreme outside width, 6 ft. 8 in.

Inside length, 11 ft. 2 in.

Inside width, 5 ft. $6\frac{1}{8}$ in.

Approximate weight, 21 cwt.

Number of passengers, 20.

Type K—Same as Type H, but with tulip spring buffers and safety chains for making up into trains.

Type KB—Same as Type K, but without brake.

Type HC—Open third class carriage with 3 bench seats, with 24 inside seats, and standing room for 4, fitted with a brake worked from both ends, mounted on steel underframes, laminated steel springs, oil axle boxes fitted with hard brass renewable bearings, mild steel axles $2\frac{3}{4}$ in. diameter in body, with journals $1\frac{3}{4}$ in. \times $3\frac{1}{2}$ in., cast steel wheels $17\frac{3}{4}$ in. diameter on the treads, car fitted with cloth curtains, spring buffer and couplings for horse traction.

Extreme length over couplings, 17 ft. 1 in.

Type KA—Same as above, but with spring tulip buffers and safety chain at each end for horse-traction.

Extreme length over couplings, 17 ft. 1 in. Approximate weight, 29 cwt.

Type I—Closed carriage with 10 seats inside, and room for 6 on the platforms, seats formed of varnished pitchpine strips parallel to the track, fitted with a brake worked from both ends, mounted on steel underframe, laminated steel springs, oil axle boxes, Type B 124, fitted with hard brass renewable bearings, mild steel axles $2\frac{3}{4}$ in. diameter in body, with journals $1\frac{3}{4}$ in. \times $3\frac{1}{2}$ in., cast steel wheels 1 ft. $5\frac{3}{4}$ in. diameter on the treads, spring buffers and couplings for horse-traction.

Extreme length over couplings, 15 ft. 6 in.

Type IK—Same as Type I, but with spring tulip buffers and safety chains for locomotive traction.

Extreme length over couplings, 16 ft. 1 in.

Type IKB—Same as Type IK, but without brake.

Type IR—Same as Type IK, but seats upholstered in silk, rich fittings, forming a first-class saloon carriage.

Type IRB—Same as Type IR, but without brake.

“DECAUVILLE” Portable and Narrow Gauge Railway.

Petrol Motor Cars on Rails.

IN order to meet the requirements of many clients we have designed a small Petrol Motor Car for narrow gauge track. The Type shown has given excellent results, especially for tours of inspection on ordinary railways, or for meeting extra traffic on tracks that are without locomotives.

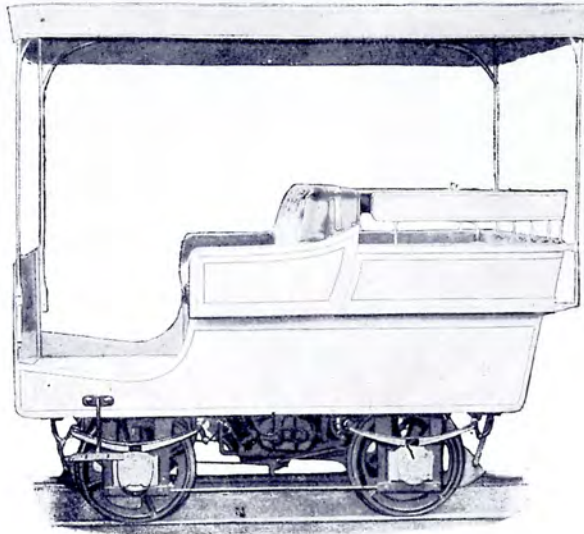


FIG. No. 755.

Petrol Motor Car on Rails, 5 h.-p. Motor, 2 speeds, $7\frac{1}{2}$ and 15 miles per hour, forward and backward water circulation. Underframe entirely of steel, mounted on 2 Mild steel axles, cast steel wheels, 1 ft. $7\frac{3}{4}$ in. diameter on the treads, oil axle-boxes fitted with hard brass renewable bearings, hung on laminated steel springs, with sliding guide, motor starting gear, friction clutch gear, speed change gear, spark regulator, and brake. The Car is constructed to seat four persons (as above figure). Type adopted by the French Minister of Colonies.

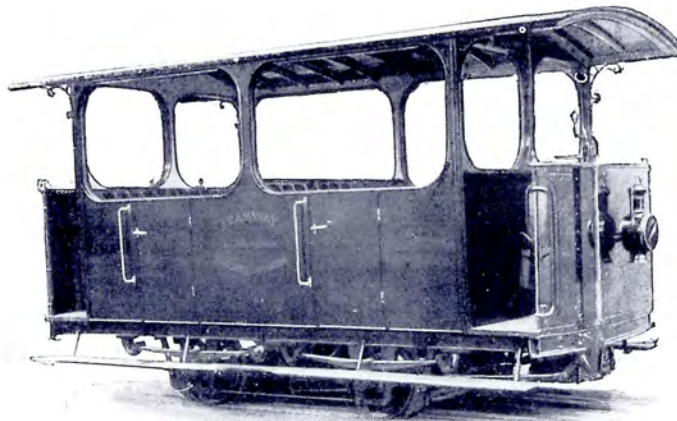


FIG. No. 756.

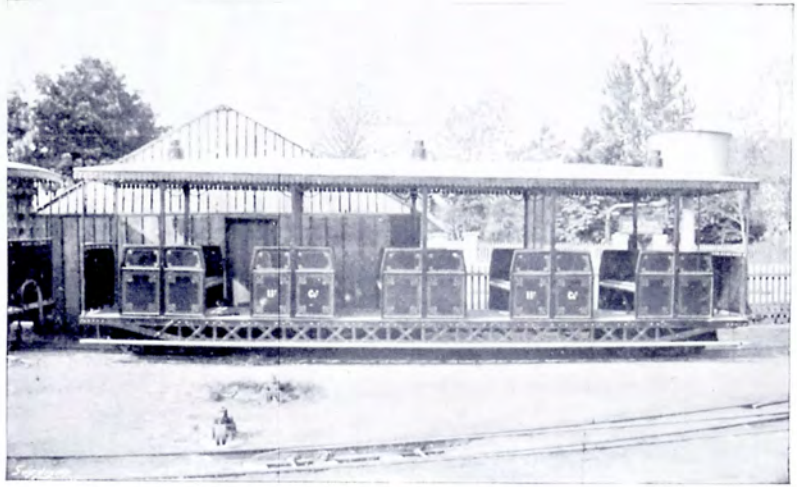
Petrol Motor Car on Rails, 8 h.-p. Motor and 2 cylinders, 2 speeds, $7\frac{1}{2}$ and 15 miles per hour, backward and forward water circulation. Underframe entirely constructed of steel, mounted on 2 Mild steel axles, cast steel wheels 1 ft. $7\frac{3}{4}$ in. diameter on the treads, oil axle-boxes fitted with hard brass renewable bearings, hung on laminated springs, with sliding guide, with motor starting gear, friction clutch gear, speed change gear, spark regulator, with brake. The Car is constructed to seat 16 persons, further room for 6 on the platforms (as above figure).

Narrow Gauge Light Railway.

Caen to Dives and Luc-sur-mer.



Terminal Depot and Running Shed.



Second Class Open Car.



First and Second Class Composite Car, with Third Class Car.



The Station at Sallenelles.



Open Third Class Car, for Summer Traffic.

“DECAUVILLE” MOTOR CARS.

2 and 4 Cylinders,

10 to 50 Horse-Power.

PETROL MOTOR CARS

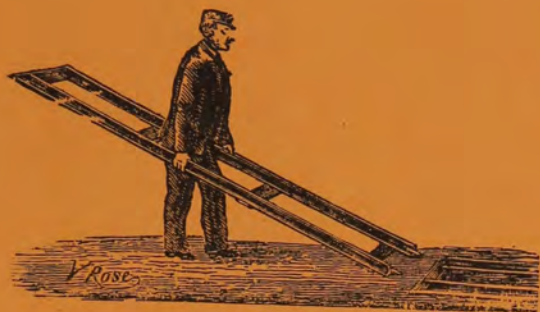
(Draisines)

ON RAILS

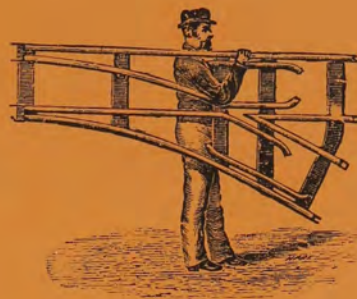
for

RAILWAYS & TRAMWAYS.

Special Catalogues and Prospectuses of both the above description
of Vehicles sent on application.



The Track is in portable sections and can be quickly laid or relaid for immediate use.



The Crossings are riveted up in one piece ready for use.



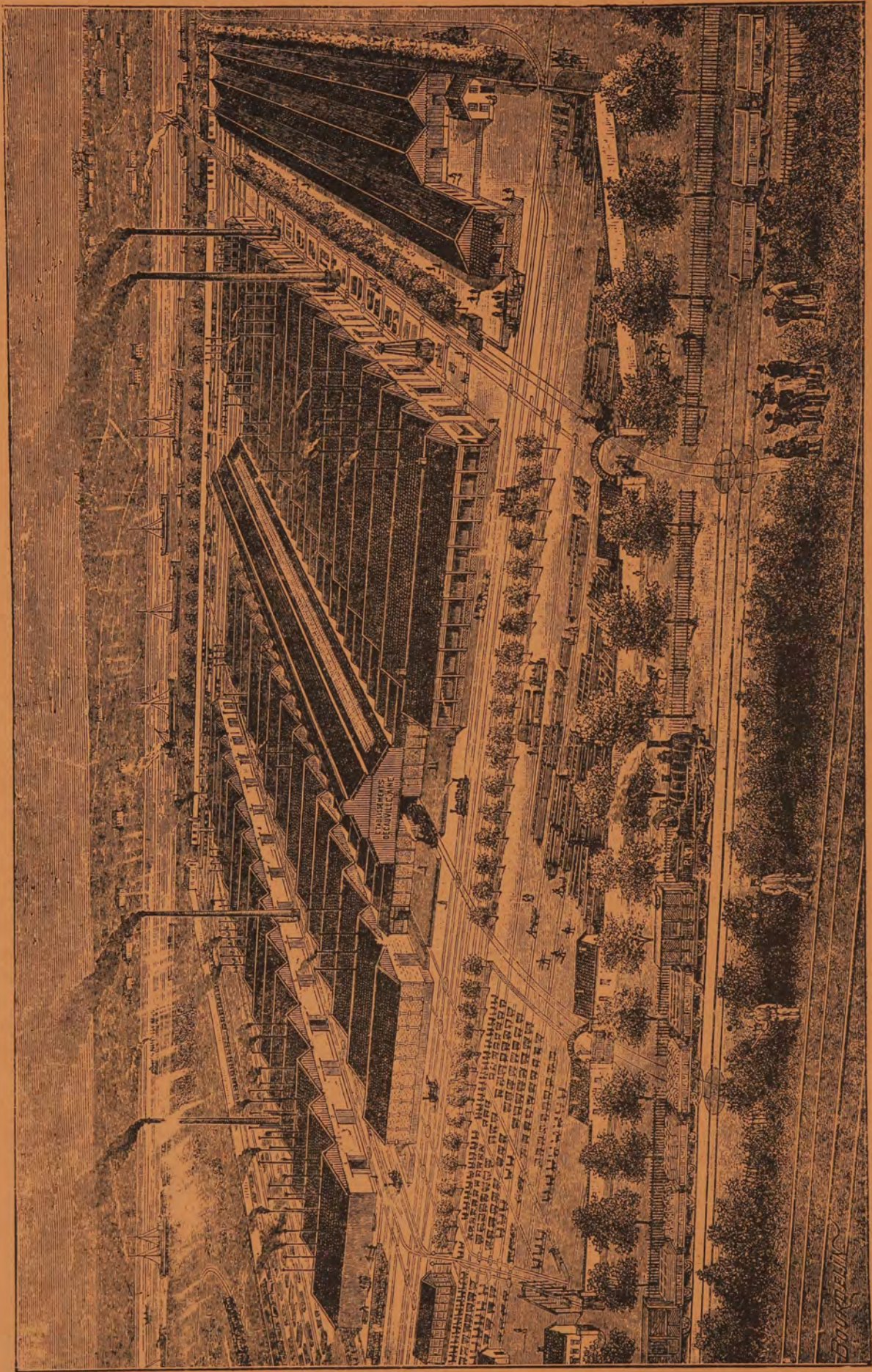
The Track can be quickly laid where required and changed from place to place without skilled labour.
Animal or Hand Traction.

Telephone—No. 2,270 AVENUE

Telegraphic Address—"VONGLEHN," LONDON.

Sole Agents: ALEXANDER VON GLEHN & CO.,

Tower House, 40 Trinity Square, LONDON, E.C.



GENERAL VIEW OF THE DECAUVILLE COMPANY'S WORKS.