

## E01B

**PERMANENT WAY; PERMANENT-WAY TOOLS; MACHINES FOR MAKING RAILWAYS OF ALL KINDS (derailing or rerailling blocks on track, track brakes or retarders [B61K](#))**

### Definition statement

*This place covers:*

Structure of stationary tracks on which propelled vehicles run for the transportation of passengers or freights;

Tools and machines specially designed for making, maintaining, renewing or taking-up the track.

### References

#### Limiting references

*This place does not cover:*

Model railways	<a href="#">A63H 19/00</a>
Wetting or lubricating rails	<a href="#">B61K 3/00</a>
Track brakes fixed to permanent way	<a href="#">B61K 7/00</a>
Devices along the track for guiding or ensuring the safety of railway traffic	<a href="#">B61L</a>
Foundation for paving	<a href="#">E01C 3/00</a>
Bridges in general	<a href="#">E01D</a>
Removing undesirable matter from the permanent way (cleaning)	<a href="#">E01H 8/00</a>
Foundations in general	<a href="#">E02D</a>
Making tunnels	<a href="#">E21D</a>
Cable through	<a href="#">H02G 9/04</a>

#### Informative references

*Attention is drawn to the following places, which may be of interest for search:*

Railway systems including the vehicle	<a href="#">B61B</a>
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### Synonyms and Keywords

*In patent documents, the following words/expressions are often used with the meaning indicated:*

"Permanent way"	" Railway, railroad"
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## E01B 1/00

**Ballastway; Other means for supporting the sleepers or the track; Drainage of the ballastway (draining by trenches, culverts, or conduits [E01F 5/00](#))**

### Definition statement

*This place covers:*

Continuous load bearing bedding for supporting the sleepers or the track, e.g. ballast or concrete slab;

Drainage of the ballastway or the ballastless bedding

## References

### Limiting references

*This place does not cover:*

Slabs as such for supporting the rails	<a href="#">E01B 3/14</a> , <a href="#">E01B 3/24</a> , <a href="#">E01B 3/40</a>
Draining of tramway rails	<a href="#">E01B 21/02</a>
Placing, working or taking-up the ballast	<a href="#">E01B 27/00</a>
Making of concrete parts of the track in situ	<a href="#">E01B 29/005</a>
Means for temporarily supporting the sleeper or the track	<a href="#">E01B 29/40</a>
Fastening railway sleepers to bridges	<a href="#">E01D 19/12</a>
Draining the sub-base of railways by trenches, culverts or conduits	<a href="#">E01F 5/00</a>

### Informative references

*Attention is drawn to the following places, which may be of interest for search:*

Draining of streets	<a href="#">E01C 11/224</a>
Draining of sport grounds	<a href="#">E01C 13/00</a> , <a href="#">E01C 13/02</a>
Draining arrangements for bridges	<a href="#">E01D 19/086</a>
Drainage of soils in general	<a href="#">E02B 11/00</a>

## E01B 2/00

**General structure of permanent way (railway networks [B61B 1/00](#); foundations for pavings [E01C 3/00](#); foundations in general [E02D](#))**

## Definition statement

*This place covers:*

General structure of the track, e.g. on bridges or in tunnels, foundations for the track.

## References

### Limiting references

*This place does not cover:*

Track superstructure adapted for tramways in paved streets	<a href="#">E01B 21/00</a>
Tracks for special kinds of railways	<a href="#">E01B 25/00</a>
General arrangements of stations, e.g. platforms	<a href="#">B61B 1/00</a>

### Informative references

*Attention is drawn to the following places, which may be of interest for search:*

Foundation for pavings	<a href="#">E01C 3/00</a>
Foundations in general	<a href="#">E02D</a>

## E01B 3/00

**Transverse or longitudinal sleepers (for switches or crossings [E01B 7/22](#));  
Other means resting directly on the ballastway for supporting rails**

### Definition statement

*This place covers:*

Sleepers and other means for supporting rails, e.g. concrete slabs, regardless of the substructure, the sleepers being parallel or orthogonal to the rails.

### References

#### Limiting references

*This place does not cover:*

Sleeper shoes for ballastless track	<a href="#">E01B 1/005</a>
Sleepers for switches or crossings	<a href="#">E01B 7/22</a>
Sleepers for shiftable tracks for heavy loads	<a href="#">E01B 23/12</a>
Manufacturing of concrete sleepers	<a href="#">B28B</a>

### Synonyms and Keywords

Sleeper	Tie, crosstie
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## E01B 5/00

**Rails; Guard rails (manufacture of rails [B21B](#)); Distance-keeping means for them**

### Definition statement

*This place covers:*

Rails for carrying vehicles with their centre of gravity above or suspended from the rail; guard rails, guide rails to prevent derailling; distance keeping means.

### References

#### Limiting references

*This place does not cover:*

Tie-rods for sleepers	<a href="#">E01B 3/00</a>
Rail parts for switches or crossings	<a href="#">E01B 7/00</a>
Rail anchors preventing shifting of the track	<a href="#">E01B 13/02</a>
Tie-rods for tramway rails	<a href="#">E01B 21/04</a>
Laying, re-building or taking-up the rails	<a href="#">E01B 29/00</a>
Working rails in or on the line	<a href="#">E01B 31/02</a>
Manufacture of rails	<a href="#">B21B</a>

## Synonyms and Keywords

Guard rail	Check rail
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## E01B 7/00

### Switches; Crossings (operating mechanisms [B61L](#))

#### Definition statement

*This place covers:*

Mechanical installation enabling trains to be guided from one track to another at a railway junction; crossing of tracks.

#### References

##### Limiting references

*This place does not cover:*

Guard rails	<a href="#">E01B 5/18</a>
Turntables	<a href="#">B61J 1/00</a>
Lubricating of rails	<a href="#">B61K 3/00</a>
Operating mechanisms	<a href="#">B61L</a>

##### Informative references

*Attention is drawn to the following places, which may be of interest for search:*

Switches for easy dismountable tracks	<a href="#">E01B 23/06</a> , <a href="#">E01B 23/16</a>
Switches for special kinds of railways	<a href="#">E01B 25/00</a>

## E01B 9/00

### Fastening rails on sleepers, or the like (fastening rails to bridges [E01D 19/12](#))

#### Definition statement

*This place covers:*

Fastening means and other track components, e.g. tie-plates, sole-plates, pads or the like, used for attaching rails on their support.

#### References

##### Limiting references

*This place does not cover:*

Fastening switches or crossings on special sleepers	<a href="#">E01B 7/22</a>
Rail anchors	<a href="#">E01B 13/02</a>
Apparatus for fixing or removing fastening means or track components	<a href="#">E01B 29/24</a> , <a href="#">E01B 29/32</a>
Fastening rails to bridges	<a href="#">E01D 19/12</a>

**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Fastening means in general	<a href="#">F16B</a>
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**E01B 9/02**

**Fastening rails, tie-plates, or chairs directly on sleepers or foundations; Means therefor**

**Definition statement**

*This place covers:*

Means for fastening rails directly on sleepers or foundations, even if the rails rest on sole-plates or pads;

Means for fastening tie plates or chairs directly on sleepers or foundations.

**References****Limiting references**

*This place does not cover:*

Tie plates per se	<a href="#">E01B 9/40</a>
Fastening the rail on the tie-plate	<a href="#">E01B 9/44</a>
Rail chairs per se	<a href="#">E01B 9/54</a>
Fastening the rail in the chair	<a href="#">E01B 9/58</a>
Special rail fastenings	<a href="#">E01B 9/60</a> , <a href="#">E01B 9/62</a> , <a href="#">E01B 9/64</a> , <a href="#">E01B 9/66</a>

**E01B 11/00**

**Rail joints (electrical connection of the rail [B60M 5/00](#))**

**Definition statement**

*This place covers:*

Dismountable or non-dismountable rail joints, e.g. by using fishplates or made by welding.

**References****Limiting references**

*This place does not cover:*

Undetachably joining in or on the track, e.g. welding	<a href="#">E01B 29/42</a>
Electrical connections of the rail	<a href="#">B60M 5/00</a>

**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Welding in general	<a href="#">B23K</a>
Locking means in general	<a href="#">F16B</a>

**E01B 13/00****Arrangements preventing shifting of the track****Definition statement**

*This place covers:*

Arrangements, e.g. rail anchors, preventing shifting such as longitudinal rail movement, which typically occurs during acceleration or deceleration of vehicles, or during expansion and contraction due to temperature change.

**References****Limiting references**

*This place does not cover:*

Machines or devices for shifting tracks	<a href="#">E01B 33/00</a>
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**E01B 15/00****Guards for preventing a person's foot being trapped in grooved rails****Definition statement**

*This place covers:*

Arrangements to avoid a person's foot to get stuck in the gap formed along a rail by grooved rails.

**References****Limiting references**

*This place does not cover:*

Safety means (in general) for rail/road crossing traffic	<a href="#">B61L 29/00</a>
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**E01B 17/00****Cattle guards connected to the permanent way (grids in general for preventing cattle from straying [A01K 3/00](#))****Definition statement**

*This place covers:*

Arrangements connected to the installations of the railroad preventing cattle or cattle-like animals (whether domesticated or not), such as horses, sheep or deer, from straying on or walking along railways, or preventing intrusion in tunnels.

**References****Limiting references**

*This place does not cover:*

Grids in general for preventing for preventing cattle from straying	<a href="#">A01K 3/00</a>
Guards or obstacles for preventing access to the route	<a href="#">B61L 29/02</a>

**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Means for fixing fences or the like to rails	<a href="#">E01B 26/005</a>
Snow fences	<a href="#">E01F 7/02</a>

**E01B 19/00**

**Protection of permanent way against development of dust or against the effect of wind, sun, frost, or corrosion; Means to reduce development of noise (snow fences [E01F 7/02](#), snow-ploughs [E01H 8/02](#), watering [E01H 11/00](#))**

**Definition statement**

*This place covers:*

Protective means of the permanent way against weather influences incorporated in the track;

Means for protecting the underground against spillage;

Means to reduce noise incorporated in the track

**References****Limiting references**

*This place does not cover:*

Snow fences	<a href="#">E01F 7/02</a>
Snow ploughs	<a href="#">E01H 8/02</a>
Control of undesirable vegetation on permanent ways of railways	<a href="#">E01H 11/00</a>

**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Spillage retaining means for large containers	<a href="#">B65D 90/24</a>
Protection against snow, sand wind or falling rocks in general	<a href="#">E01F 7/00</a>
Noise absorbing or reflecting arrangements for railways	<a href="#">E01F 8/00</a>
Removing snow or ice from roads	<a href="#">E01H 5/00</a>

**E01B 21/00**

**Track superstructure adapted for tramways in paved streets (paving [E01C 9/04](#), [E01C 9/06](#))**

**Definition statement**

*This place covers:*

Embedded rail systems, where the traffic area of rail vehicles needs to be shared with road users of private transport, such as cars, trucks or bikes and pedestrians.

## References

### Limiting references

*This place does not cover:*

Paving for railroad level crossings	<a href="#">E01C 9/04</a>
Paving adjacent tramway rails	<a href="#">E01C 9/06</a>

### Informative references

*Attention is drawn to the following places, which may be of interest for search:*

Bedding e.g. ballast or concrete	<a href="#">E01B 1/00</a>
Drainage of the track	<a href="#">E01B 1/008</a>

## E01B 23/00

**Easily dismountable or movable tracks, e.g. temporary railways; Details specially adapted therefor**

### Definition statement

*This place covers:*

Light railways such as field, colliery or mine use, temporary railways, as well as shiftable tracks for heavy loads.

## References

### Limiting references

*This place does not cover:*

Model or toy railways	<a href="#">A63H 19/00</a> , <a href="#">A63H 21/00</a>
Runway or tracks for trolleys or cranes	<a href="#">B66C 7/00</a>
Rails of supporting structures for mobile scaffolds provided on roofs	<a href="#">E04G 3/34</a>

### Informative references

*Attention is drawn to the following places, which may be of interest for search:*

Propelled stands or trestles, e.g. on tracks, as supports for apparatus placed thereon	<a href="#">F16M 11/42</a>
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## E01B 25/00

**Tracks for special kinds of railways (systems [B61B](#); wheel tracks on roads [E01C 9/02](#))**

### Definition statement

*This place covers:*

Special kinds such as rack railways, mono rails, cable-drawn, stationary aerial rope, supporting rails for suspended vehicles, tracks for guiding vehicles, magnetic suspension.



## References

### Limiting references

*This place does not cover:*

Slaughterhouse conveying track	<a href="#">A22B 7/001</a>
Overhead rail system for handicapped persons	<a href="#">A61G 7/1042</a>
Electric propulsion	<a href="#">B60L 13/00</a>
Suspended load carriers movable by hand or gravity	<a href="#">B65G 9/008</a>
Wheel tracks	<a href="#">E01C 9/02</a>

### Informative references

*Attention is drawn to the following places, which may be of interest for search:*

Rope railway systems using cables as traction means	<a href="#">B61B 7/00</a>
Funicular systems	<a href="#">B61B 9/00</a>
Other railway systems	<a href="#">B61B 13/00</a>
Not vehicle mounted steering control for guiding road vehicles, e.g. in urban networks.	<a href="#">B62D 1/26</a>

## E01B 27/00

**Placing, renewing, working, cleaning, or taking-up the ballast, with or without concurrent work on the track; Devices therefor; Packing sleepers**

### Definition statement

*This place covers:*

Placing, redistributing, levelling, loosening the ballast; removing or taking-up ballast; renewing or cleaning the ballast in situ, with or without taking-up or lifting the track; compacting the ballast with or without introducing additional fresh material under the sleepers.

## References

### Limiting references

*This place does not cover:*

General body details of railway vehicles, e.g. working platform	<a href="#">B61D</a>
Removing undesirable matter from the permanent way	<a href="#">E01H 8/00</a>

## Glossary of terms

*In this place, the following terms or expressions are used with the meaning indicated:*

Packing sleepers	Locally compacting the ballast in the vicinity of the sleepers
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## E01B 29/00

**Laying, rebuilding, or taking-up tracks; Tools or machines therefor**  
([E01B 27/00](#), [E01B 31/00](#) take precedence)

### Definition statement

*This place covers:*

Transporting, laying, removing or renewing rails, sleepers or lengths of assembled track;

Lifting or levelling of tracks; installing or removing fastening means or other track components, e.g. rail clips, sole-plates;

Undetachably joining or fastening track components in or on the track, e.g. by welding; Sealing rail joints.

### References

#### Informative references

*Attention is drawn to the following places, which may be of interest for search:*

Welding in general	<a href="#">B23K</a>
Fastening tools in general	<a href="#">B25B</a>
Hand held nailing or stapling tools	<a href="#">B25C</a>
Devices for moving or tilting heavy loads	<a href="#">B65G 7/00</a>
Cranes mounted on railway vehicles	<a href="#">B66C 23/50</a>
Lifting devices in general	<a href="#">B66F</a>
Glueing metal parts in general	<a href="#">F16B 11/00</a>

### Glossary of terms

*In this place, the following terms or expressions are used with the meaning indicated:*

Ribbon rails	Rails assembled into strings
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## E01B 31/00

**Working rails, sleepers, baseplates, or the like, in or on the line; Machines, tools, or auxiliary devices specially designed therefor (characterised by features independent of use on assembled track [B21](#), [B23](#) - [B25](#), [B27](#))**

### Definition statement

*This place covers:*

Working such as reconditioning, repairing or treating track components in or on the line and machines specially designed therefor.

### References

#### Limiting references

*This place does not cover:*

Working the ballast	<a href="#">E01B 27/00</a>
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Laying, rebuilding or taking up tracks or track components	<a href="#">E01B 29/00</a>
Undetachably joining or fastening track components	<a href="#">E01B 29/42</a>

## **E01B 33/00**

**Machines or devices for shifting tracks, with or without lifting, e.g. for aligning track, for shifting excavator track (combined with sleeper packing machines [E01B 27/17](#))**

### **References**

#### **Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Machines combined with sleeper packing machines	<a href="#">E01B 27/17</a>
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## **E01B 35/00**

**Applications of measuring apparatus or devices for track-building purposes (apparatus on locomotives or cars to indicate or record bad track sections [B61K 9/00](#); measuring angles, linear dimensions, or irregularities in general [G01B](#), [G01C](#))**

### **Definition statement**

*This place covers:*

Measuring for track building, maintaining or renewing purposes.

### **References**

#### **Limiting references**

*This place does not cover:*

Apparatus on locomotives or cars to indicate or record bad track sections	<a href="#">B61K 9/00</a>
Devices along the track for guiding or ensuring the safety of railway traffic	<a href="#">B61L</a>

#### **Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Measuring angles, linear dimensions, or irregularities in general	<a href="#">G01B</a> , <a href="#">G01C</a>
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