



# INDUSTRIAL REVOLUTION



## Sir Richard Arkwright

**(23 December 1732 – 3 August 1792)**  
Taught to read and write by his cousin, Arkwright began as an apprentice barber, but after an early widowhood his business ambitions grew, and his second marriage provided the funds to pursue wigmaking. When wigs fell out of fashion, he turned to textiles and made improvements on the spinning jenny with the clockmaker John Kay. Taking his business to the small village of Cromford, Arkwright encouraged weavers with large families to move there and work in his mill, including children as young as seven. Arkwright pioneered the use of the steam engine with textile machinery, a precursor to Edmund Cartwright's development of the power loom. In his later years, after an extended court battle, Arkwright lost many of his patents and his domination of the textile industry, but shortly after this he was knighted. Ambitious, religiously devout, and at times difficult to work with, Arkwright's ingenuity and organizational skills would make him known as the "father of the modern industrial factory system."

RICHARD ARKWRIGHT



## Eliza Tinsley

**(17 January 1813 – 17 January 1882)**  
Following the death of her husband Thomas and his father, along with the death of her eldest of six children, Tinsley continued both her late husband and her late father-in-law's businesses in the Black Country as one under her own name. The Eliza Tinsley company produced nails for horseshoes, and chains and anchors for ships, the latter of which would become the focus as motor vehicles replaced horses. Chainmaking was a particularly male-dominated industry, but Tinsley excelled, employing around 4000 workers, and she established an offshoot company in Australia. Many of Tinsley's employees were women and young girls, and she fought against government efforts to restrict women, and girls under 14, from working in the nail and chainmaking industries, arguing that "the conditions of both trades are favourable to moral and physical health." Known as "The Widow," Tinsley was respected for her industry expertise. She sold the company at 58, but it would continue operating under her name into the 21st century.

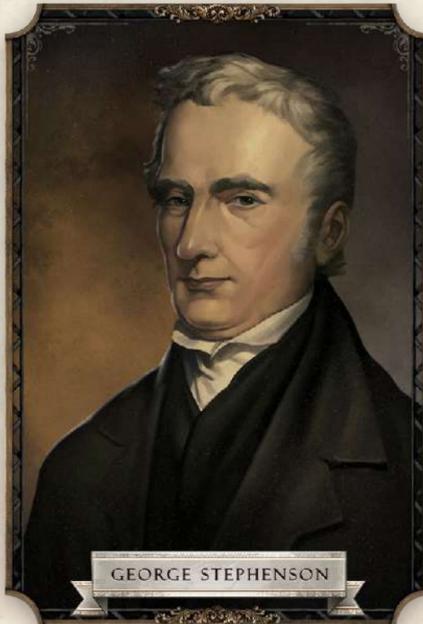
ELIZA TINSLEY



## Isambard Kingdom Brunel

**(9 April 1806 – 15 September 1859)**  
At the age of 15, Brunel's father Marc was sent to a debtors' prison, but his debts were paid by the British government when he made it known that the Tsar had offered him a position as an engineer in Russia. Brunel studied in France under the clockmaker Abraham Louis Breguet. Upon returning to England he became an assistant on Marc's project to create a tunnel under the Thames, but a nearly-fatal flooding incident put the 22-year-old out of commission for several months. This didn't stop Brunel from becoming one of the most prolific engineers in history, creating tunnels, bridges, railways, a portable hospital, and a vacuum-powered 'atmospheric railway', though unfortunately for the latter the leather flaps sealing the vacuum pipes were eaten by rats. His 'Great Western' was the first steamship to conduct transatlantic service, and his 'Great Eastern' was the largest ship ever built up to that time, but Brunel died of a stroke at 53 just before her maiden voyage. Brunel is known today as an engineering giant.

ISAMBARD KINGDOM BRUNEL

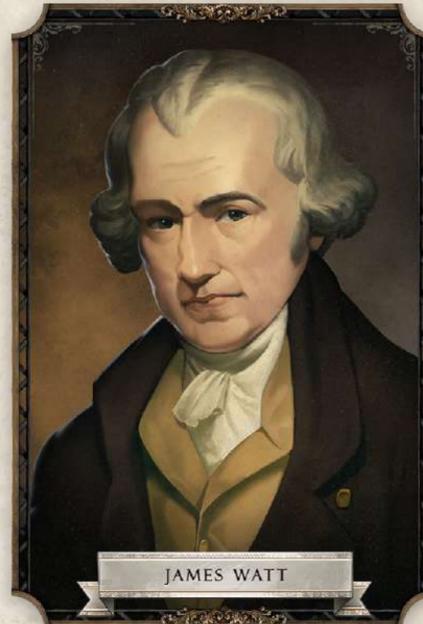


## George Stephenson

**(9 June 1781 – 12 August 1848)**  
After the death of his wife and daughter, the 25-year-old Stephenson, having no formal education, left for Scotland to find work but returned to West Moor when his father was blinded in a mining accident. When he offered to improve the mine's deficient pumping engine, Stephenson was made enginewright and became an expert in steam-engine technology. His Northumberland accent made him unpopular with the scientific community, and when he presented his design for a safer mining lamp that would not cause explosions, the Royal Society accused him of stealing the concept from parallel-inventor Humphry Davy. But Stephenson's big claim to fame was his contribution to rail transport, and the invigoration of the rail industry. At age 40 he began work on the first public railway, and his locomotive known as 'Stephenson's Rocket' won a competition by achieving the record speed of 36 miles per hour, which led some to fear that such speeds would cause women's uteruses to literally fly out of their bodies. Thankfully this did not occur.

GEORGE STEPHENSON

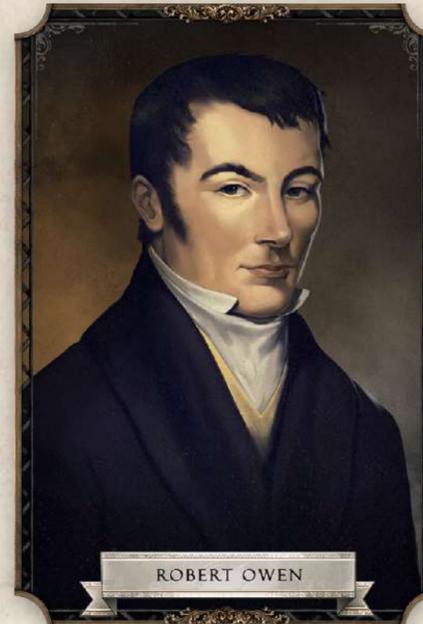
# HISTORICAL FIGURES



## James Watt

**(30 January 1736 – 25 August 1819)**  
Tinkering with models and ship's instruments at his father's workbench from an early age, Watt left for Glasgow at 17 to learn to make measuring instruments such as scales and compasses, and befriended the chemist Joseph Black. In his 30s, while repairing a model of the Newcomen steam engine used widely for pumping water out of mines, Watt noticed that the design wasted energy on cooling and reheating the cylinder, and he improved upon it by adding a separate condenser which would revolutionize the steam engine. However he was unable to make progress on this venture for several years as he was busy at his day job surveying Scottish canals. This changed when English manufacturer Matthew Boulton took an interest in his patent, and Watt moved to Birmingham to form a partnership that would last 25 years and spread his improved steam engine across the world of industry. Though a somewhat feeble businessman on his own (Watt once said he "would rather face a loaded cannon than settle an account or make a bargain"), he was greatly respected by his peers, and the basic unit of power, the "watt," bears his name.

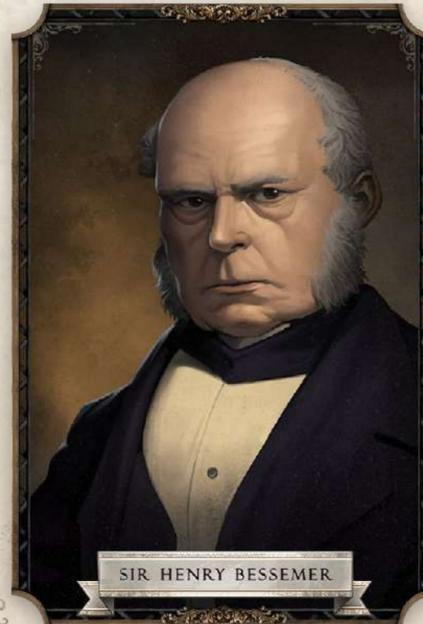
JAMES WATT



## Robert Owen

**(14 May 1771 – 17 November 1858)**  
Falling in love with Caroline Dale, daughter to the owner of the New Lanark mill co-founded by Richard Arkwright, Owen convinced his business partners to purchase the mill. He ran it with great success, but displeased his partners with egalitarian activities such as paying wages to his workers over a four month period in which the mills were closed during the War of 1812. An avid scholar, Owen became critical of prevailing religious thought on human self-determinism, and he developed his own philosophy that one's circumstances are largely the result of external forces, and that therefore education and philanthropy should be paramount in society. He undertook a variety of social reform projects such as lobbying for workers and children's rights and for an 8-hour work day, and temporarily left Britain to found a socialist commune in America called New Harmony. The experiment was an economic failure that bankrupted Owen, but it did produce one of the first public libraries and a free school open to both boys and girls, and his philosophies are deeply woven into socialist movements within the United States.

ROBERT OWEN



## Sir Henry Bessemer

**(19 January 1813 – 15 March 1898)**  
Like Isambard Kingdom Brunel's father, Bessemer's father Anthony was forced to flee France during the French Revolution. Anthony had become a member of the Académie des sciences at 26 for his improvements on the optical microscope, and made his fortune in Britain with a process for making gold chains. Bessemer's first innovation mirrored his father's affinity for gold. After carefully analyzing bronze powder from Nuremberg, used in the manufacture of gold paint, he reverse engineered the process and created a series of six steam-powered machines that could manufacture the powder. He later developed a cheap system of creating steel by blowing air through molten pig iron to burn off impurities. The goal was initially to reduce the cost of military ordnance, but this technique of affordable steel revolutionized structural engineering and made bridges and railroad tracks, previously reliant on wrought and cast iron, much safer. Bessemer pioneered over 100 inventions in the fields of metalworking and glass, including a steamship cabin on gimbals intended to stay level to prevent seasickness which was sadly lost at sea, and he gained considerable commercial success leveraging his innovations.

SIR HENRY BESSEMER



## Eleanor Coade

**(3 June 1733 – 16 November 1821)**  
Bringing her up a devout Baptist, Coade's parents were both successful merchants. Her grandmother Sarah Enchmarch had run the family textile business in Tiverton with 200 employees, using spies to acquire new manufacturing techniques, and was known for travelling around town in a sedan chair. After Coade's family moved to London, she ran her own linen draper business at age 30. Six years later she purchased an artificial stone business from the struggling Daniel Pincoot, but fired him within two years for "representing himself as the chief proprietor." Her ceramic stoneware called "Coade's Lithodipyr" went on to be used in over 700 sculptures across the globe, many of them overseen by the sculptor John Bacon, though she worked with a number of high-profile designers and architects as it allowed her to produce multiple copies of their designs. The South Bank Lion may be Coade's most iconic piece, but her product was also used for the Gothic screen of St George's Chapel, and in the restoration of Buckingham Palace.

ELEANOR COADE

## BOARD SETUP

- Place the board on either the day or night side.
- For a player count of less than 4, remove all cards and Merchant tiles that show a player count greater than your number of players, and return them to the box.  
The 2-player (2), 3-player (3), and 4-player (4) counts are shown in the bottom right corner on the front of the cards (A) and along the top of the merchant tiles (B).



- Separate the Wild Location (C) and Wild Industry (D) cards and place them face up on 2 of the Card Draw Areas.
- Shuffle the remaining cards and place them face down on the remaining Card Draw Area (E); this is the Draw Deck.
- Shuffle the remaining Merchant tiles, and place 1 (face up) on each of the Merchant spaces marked with the number of players in your game (F), located near the edges of the board.

**Result:** In a 2 player game, no Merchant tiles are placed in Warrington (G) & Nottingham (H). In a 3-player game, no Merchant tiles are placed in Nottingham (H).



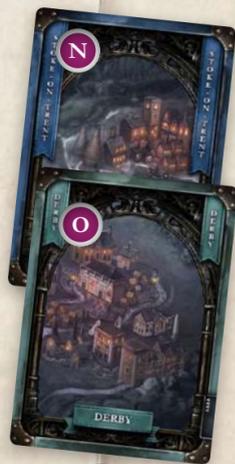
- Place 1 beer barrel on each beer barrel space beside a (non-blank) Merchant tile (I).
- Place 1 black cube on each space of the Coal Market (J), leaving 1 of the £1 spaces open.
- Place 1 orange cube on each space of the Iron Market (K), leaving both of the £1 spaces open.
- Place the remaining cubes and beer barrels beside the board; this is the General Supply (L).
- Place the money beside the board; this is the Bank (M).



## LOCATION BANNERS

In addition to helping players find locations on the board, the colours of the location banners also indicate which Location cards are in the Draw Deck. This varies with the player count:

- 2 players: blue (N) and teal (O) coloured Location cards are not in the Draw Deck.
- 3 players: teal (O) coloured Location cards are not in the Draw Deck.
- 4 players: all Location cards are in the Draw Deck.



## PLAYER AREA SETUP

- Take a Player Mat.
- Take £17 from the Bank (P).
- Choose a coloured Character tile.
- Place the matching coloured Link tiles in your player area (Q).
- Stack the matching coloured Industry tiles (which consist of Cotton Mills (R), Coal Mines (S), Iron Works (T), Manufacturers (U), Potteries (V), and Breweries (W)) on their appropriate slots on your Player Mat. The side of the tiles with the black top half should be face down.



- Place your Victory Point (VP) Marker on the "0" space of the Progress Track (X).
- Place your Income Marker on the "10" space of the Progress Track (Y).
- Draw 8 cards from the Draw Deck; this is your Hand. Do not reveal your Hand to other players.
- Draw 1 additional card from the Draw Deck and place it face down in your player area; this is your Discard Pile.

After all players have set up their player area, shuffle all players' Character tiles together and place them in a random order on the Turn Order Track (Z).

# PLAYING THE GAME

## THE GOAL

The game is played over 2 eras: the Canal Era (1770-1830) and the Rail Era (1830-1870). The winner is the player who has the most Victory Points (VPs) following the end of the Rail Era. VPs are scored at the end of each era for your Link tiles and flipped Industry tiles.

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## ROUNDS

Each era is played in rounds, which continue until both the Draw Deck and players' Hands are exhausted. There are exactly 8/9/10 rounds per era in a 4/3/2-player game. During each round, players take turns in the order of their Character tiles on the Turn Order Track.

## PLAYER TURNS

On your turn, perform a total of 2 actions.

\*\*Exception: During the first round of the Canal Era, each player performs only 1 action.\*\*

- For each action you perform, you must discard a card from your Hand and place it face up on top of your Discard Pile.

\*\*Exception: Wild cards are placed back onto their Card Draw Areas.\*\*

- After all of your actions have been completed, refill your Hand back up to 8 cards with cards from the Draw Deck.
- Place all money spent during your turn on top of your Character tile on the Turn Order Track.
- Once the Draw Deck has been exhausted, your Hand will decrease each round until you have no cards left.

## ACTION LIST

For each action, you may choose to perform one of the following (you may perform the same action twice):

- Build** - Place one of your Industry tiles onto the board, paying the appropriate cost and consuming any required coal / iron.
  - Network** - Expand your canal or rail network by adding Link tiles to the board.
  - Develop** - Gain access to higher-level industries by removing Industry tiles from your Player Mat.
  - Sell** - Flip your built Cotton Mill, Manufacturer, and/or Pottery tiles, by selling to a Merchant, and consuming beer if necessary.
  - Loan** - Take a £30 loan from the Bank, and move your Income Marker 3 income levels (not spaces) backwards.
  - Scout** - Discard 2 additional cards from your Hand and replace them with 1 Wild Industry and 1 Wild Location card.
- \*\*Exception: You may not perform this action if you already have a Wild card in your Hand.\*\*

**Passing** - You may choose to pass instead of performing an action, but must still discard a card for each action you pass.

**Spending Money** - Any time you spend money to perform an action, you must place it on top of your Character tile **A** on the Turn Order Track. Placing spent money here, rather than in the Bank, will allow you to determine the players' turn order for the next round.

## END OF ROUND

After all players have taken their turn, perform the following before moving on to the next round:

- Determine turn order for the next round** Rearrange the Character tiles on the Turn Order Track.
  - The player who spent the least money this round will go first next round **B**, and so on, while the player who spent the most will go last **C**.
  - If multiple players have spent an equal amount, their relative turn order remains the same **C**.
  - Afterwards, take all money from the Character tiles, and place it back into the Bank **D**. This resets the money spent, ready for the next round.

- Take Income** Take money from the Bank equal to your income level. \*\*Exception: Income is not collected at the end of the final round of the game.\*\*
  - Your income level is the number displayed on the coin beside your Income Marker's current location on the Progress Track **E**.

- If you have a shortfall when paying negative income, you must acquire money by removing one or more of your Industry tiles (not Link tiles) from the board; each being worth half of its cost, rounded down. You keep any excess money.
- If you have no way to pay a shortfall, lose 1 VP (if possible) for each £1 you are short.

- If your income level is negative **F**, you must pay that amount of money to the Bank.

**Note:** You may remove any of your Industry tiles, but must stop as soon as you have acquired enough money to cover the shortfall. You may not sell Industry tiles for any reason other than paying for a shortfall.

# END OF ERA MAINTENANCE

## END OF CANAL & RAIL ERA

Each era ends following the round in which all players use the final cards in their Hands. When this occurs, perform the following steps:

- Score Canal/Rail Links** For each of your Link tiles **G**, score 1 VP for each **H** displayed in adjacent locations, by advancing your VP Marker along the Progress Track **H**. Remove Link tiles from the board as they are scored.
- Score Flipped Industry Tiles** After all players have removed their Link tiles, score the VPs shown in the bottom left corner of your flipped Industry tiles (those with a black top half), by advancing your VP Marker along the Progress Track **H**. Unflipped Industry tiles **I** do not score.

**Note:** If you score more than 100 VPs, record the additional points by starting another loop of the Progress Track.

## END OF CANAL ERA

Perform the following additional steps at the end of the Canal Era:

- Remove Obsolete Industries** Remove all level 1 Industry tiles from the board **J** (not from Player Mats), and return them to the box. All level 2 or greater Industry tiles remain on the board **K**.
- Reset Merchant Beer** Place 1 beer barrel **L** on each empty beer barrel space beside a (non-blank) Merchant tile **M**.
- Shuffle Draw Deck** Shuffle all players' Discard Piles together and place the cards face down on the appropriate Card Draw Area **N**.

Remember: The bottom card of each Discard Pile will be face down, and needs turning over before shuffling.

## WINNING THE GAME

After performing Rail Era scoring:

- The player with the most VPs is declared the winner.
- Ties are broken, first by the highest income, and then by the most money remaining.
- If still tied, those players draw.



# GAMEPLAY CONCEPTS

## FLIPPING INDUSTRY TILES

At the end of each era, flipped Industry tiles score VPs. When flipped, they have a black top half and a VP icon in the bottom left corner.

### Different Industry tiles are flipped in different ways:

- **Cotton Mills, Manufacturers, and Potteries:** Flipped when you perform a Sell action.
- **Coal Mines, Iron Works, and Breweries:** Flipped when the last resource is removed from the tile. This often happens during an opponent's turn.

## INCREASING YOUR INCOME

Whenever your income is increased, immediately advance your Income Marker along the Progress Track **A** by the number of spaces (not income levels) shown.



\*\*Exception: You cannot increase your income level above level 30.\*\*

## YOUR NETWORK

A location on the board is considered to be a part of your network if at least one of the following is true:

- The location contains one or more of your Industry tiles **B**;
- The location is adjacent to one or more of your Link tiles **C**.

## CONNECTED LOCATIONS

Two locations are considered "connected" to each other if you can trace a route of Link tiles (owned by any player) from one location **D** to the other **E**.



## CONSUMING COAL

Coal is required to build rail Links and certain Industry tiles.

To consume coal, a rail Link or Industry tile must be connected to a source of coal (after it is placed).

### Coal must be consumed from:

- 1 The closest (fewest Link tiles distant) connected unflipped Coal Mine **F** (owned by any player). If multiple Coal Mines are equally close, choose one. If a Coal Mine runs out of coal, and you need more, choose the next closest Coal Mine. Consuming coal in this way is free.
- 2 If you are not connected to an unflipped Coal Mine, you can purchase coal from the Coal Market **G**, starting at the cheapest price. This requires a connection to a icon (shown on the Warrington, Shrewsbury, Nottingham, Gloucester, and Oxford Merchants around the edge of the board). If the Coal Market is empty, you can still purchase coal for £8 / .

Consumed coal cubes are placed back into the General Supply.

**Historical Note:** Coal was required in large quantities, so a robust transportation network was critical.

## CONSUMING BEER

You may be required to consume beer when selling cotton, manufactured goods, or pottery; or when performing the Network action during the Rail Era. The amount required, if any, will be shown in the top right corner of the Industry tile.

### Beer may be consumed from any of the following sources:

- 1 Your unflipped Breweries **J**. These do not need to be connected to the location where the beer is required.
- 2 An opponent's unflipped Brewery **K**. These must be connected to the location where the beer is required.
- 3 The space beside a Merchant tile that you are selling to (see "Action - Sell").

When multiple beer barrels are required, each beer may be consumed from a different source.

Consumed beer barrels are placed back into the General Supply.

**Historical Note:** Unpolluted drinking water was in short supply in expanding settlements, so beer was often the purest and safest drink available.

## CONSUMING IRON

Iron is required to perform the Develop action, and to build certain Industry tiles.

To consume iron, an Industry tile **does not** need a connection to a source of iron.

### Iron must be consumed from:

- 1 Any unflipped Iron Works **H** (owned by any player); it does not have to be the closest. If you need more than 1 iron, you can consume each iron from a different Iron Works. Consuming iron in this way is free.
- 2 If there are no unflipped Iron Works, you can purchase iron from the Iron Market **I**, starting at the cheapest price. If the Iron Market is empty, you can still purchase iron for £6 / .

Consumed iron cubes are placed back into the General Supply.

**Historical Note:** These industries generally required iron in low volumes, so it could also be transported via horse and wagon.

# ACTIONS

## BUILD ACTION

Performing the Build action allows you to place Industry tiles onto a location on the board.

### To perform the Build action:

- 1 Discard an appropriate card. Unlike other actions, which allow you to use any card from your Hand, the Build action requires an appropriate card be discarded face up onto your Discard Pile:

\*\*Exception: Wild cards are placed back onto their Card Draw Area.\*\*

#### • Location card

May be used to build any Industry tile at the location named on the card, even if the location is not a part of your network.

#### • Wild Location card

May be played as any Location card. This does not include the 2 Farm Breweries (see "Farm Breweries").

#### • Industry card

May be used to build the Industry tile matching an icon shown in the top corner of the card, in a location that is a part of your network.

#### • Wild Industry card

May be played as any Industry card.

- 2 Take the lowest level tile **L** of the chosen industry from your Player Mat and place it (the side with the black top half face down) on an undeveloped space in your chosen build location, obeying the following rules:

- If possible, place it on a space displaying only that industry's icon **M**.
- Otherwise, place it on a space displaying that industry's icon with another industry's icon **N**.
- If no undeveloped spaces display your industry's icon, you may not place it in that location. \*\*Exception: (see "Overbuilding")\*\*

- 3 The cost of the Industry tile you are building is displayed, to the left of its slot, on your Player Mat **O**. Pay money onto your Character tile on the Turn Order Track, and consume any required iron and coal **P**. Remember: If coal is required, the location you are building in must be connected to a source of coal (see "Consuming Coal" and "Connected Locations").

### 4 If you built a Coal Mine or Iron Works

Place coal or iron onto the Industry tile, equal to the quantity shown in the bottom right corner of the tile.

### Brewery

Place 1 beer barrel on the Industry tile if it is built during the Canal Era, or 2 beer barrels if it is built during the Rail Era.

## Moving Coal and Iron to the Market

If you build either a:

- **Coal Mine** that is connected to any Merchant space (even those without Merchant tiles); **OR**
- **Iron Works**, regardless of whether or not it is connected to a Merchant space:

- 1 You must immediately move as many cubes as possible from the Industry tile in any location with an undeveloped space displaying that industry's icon; these are Farm Breweries.
- 2 For each cube moved, collect the corresponding amount of money displayed on the coin to the left side of its Market space **P**.
- 3 If the last cube is moved from your Industry tile to its Market, flip the Industry tile **Q** and advance your Income Marker along the Progress Track by the number of spaces shown in the bottom right corner of the tile.

## Building If You Have No Tiles on the Board

If you have no Industry or Link tiles on the board, you may (as an action) discard:

- An Industry card to build the matching Industry tile in any location with an undeveloped space displaying that industry's icon;
- Any card to build a Link tile on any undeveloped line on the board.

## Farm Breweries

There are 2 unnamed locations, each with 1 space displaying a Brewery icon; these are Farm Breweries.

- You may only build in these locations using a Brewery Industry card or a Wild Industry card.
- A Link tile is required to connect Cannock to the Farm Brewery to its left.

- A Link tile placed between Kidderminster and Worcester also connects both locations to the Farm Brewery to their left. A second Link tile is not required; nor may it be placed there.



Note: Coal and iron cubes may only be sold to their Markets during the action when their Industry tile is built. They are never sold to their Markets in later turns.

# ACTIONS

## BUILD ACTION (CONTINUED)

### Canal Era Building

- You may have a maximum of 1 Industry tile per location, but may have an Industry tile in the same location as other players.



BIRMINGHAM

- Industry tiles with a **D** to the left of their slot on your Player Mat **may not be built**.

### Rail Era Building

- You may build multiple Industry tiles in each location.



BIRMINGHAM

- Industry tiles with a **I** to the left of their slot on your Player Mat **may not be built**. To remove these tiles (and access the higher-level tiles) you must perform the Develop action.

## Overbuilding

Sometimes you are allowed to replace an already placed Industry tile with a higher-level tile of the same industry type (you must still pay the necessary build costs). This is known as Overbuilding. When Overbuilding:

**If the tile you are replacing is your own (A):**

- You may Overbuild any Industry tile.
- If there are any iron / coal cubes on the tile being replaced, place them back into the General Supply.

**If the tile you are replacing is owned by an opponent (B):**

- You may Overbuild only a Coal Mine or an Iron Works.
- There must be no resource cubes on the entire board, including in its Market, of the same type as the Industry tile being replaced.

Remove overbuilt Industry tiles from the game, and return them to the box (they will not score VPs). Players do not lose income or VPs if their Industry tiles are overbuilt.



BIRMINGHAM

## SELL ACTION

Performing the Sell action allows you to flip built Cotton Mill, Manufacturer, and Pottery tiles. Selling requires:

- Connection to a Merchant tile.
- Beer (usually).

**To perform the Sell action:**

- Discard any card from your Hand and place it face up onto your Discard Pile.

**\*\*Exception:** Wild cards are placed back onto their Card Draw Area.\*\*

- Choose 1 of your unflipped Cotton Mill, Manufacturer **C**, or Pottery tiles, that is connected to a Merchant tile featuring that industry's icon **D**.

- Consume the required amount of beer, shown in the top right corner of the Industry tile. If there is a beer barrel **E** on the space beside the Merchant tile you are selling to, you may consume this beer as part of the Sell action, and collect the Merchant beer bonus (see "Merchant Beer Bonuses").

- Flip the Industry tile and advance your Income Marker along the Progress Track by the number of spaces shown in the bottom right corner of the tile.

- You may go back to step 2 and repeat the process for each of your unflipped Industry tiles (including those of a different industry).

**Note:** You cannot perform the Sell action if you cannot consume the required beer (see "Consuming Beer").

## Merchant Beer Bonuses

Merchant beer may only be consumed as part of a Sell action. If you consume a Merchant beer, you also receive the bonus displayed beside that Merchant tile's location:

- Develop (Gloucester)**  
Remove 1 of the lowest level tiles of any industry from your Player Mat.

**\*\*Exception:** You cannot remove a Pottery tile showing a [lightbulb icon] (see "Potteries and the Lightbulb Icon").\*\*

- Income (Oxford)**  
Advance your Income Marker 2 spaces along the Progress Track.

- Victory Points (Nottingham and Shrewsbury)**  
Advance your VP Marker along the Progress Track by the number of spaces indicated.

- Money (Warrington)**  
Receive £5 from the Bank.



# ACTIONS

## LOAN ACTION

Performing the Loan action allows you to acquire more money. Loans are never repaid, but instead lower your income level.

**To perform the Loan action:**

- Discard any card from your Hand, and place it face up onto your Discard Pile.

**\*\*Exception:** Wild cards are placed back onto their Card Draw Area.\*\*

- Take £30 from the bank, and move your Income Marker 3 income levels (not spaces) backwards down the Progress Track **F**. Place your Income Marker on the highest space within the lower income level.

**\*\*Exception:** You cannot take a loan if it will take your income level below -10.\*\*

## SCOUT ACTION

Performing the Scout action allows you to acquire Wild cards, which provide increased flexibility in where you may build. The Wild Industry card can be played as any Industry card. The Wild Location card can be played as any Location card. When discarded, a Wild card is placed back onto its Card Draw Area, not onto your Discard Pile.

**To perform the Scout action:**

- Discard any 3 cards from your Hand, and place them face up onto your Discard Pile.

- Take 1 Wild Location and 1 Wild Industry card.

**Note:** You may not perform this action if you already have a Wild card in your Hand.

## DEVELOP ACTION

Performing the Develop action allows you to remove Industry tiles from your Player Mat. This allows you to gain access to higher-level Industry tiles without having to build all of the lower-level tiles of that industry.

**To perform the Develop action:**

- Discard any card from your Hand, and place it face up onto your Discard Pile.

**\*\*Exception:** Wild cards are placed back onto their Card Draw Area.\*\*

- Remove 1 or 2 Industry tiles from your Player Mat, and return them to the box. Each Industry tile is removed separately and does not need to be of the same industry, but must be the lowest level tile of the chosen industry (as it is removed) **G**.

Consume 1 iron for each tile removed (see "Consuming Iron").

## Potteries and the Lightbulb Icon

Pottery tiles that show a lightbulb icon may not be developed. These tiles may only be removed from your Player Mat through use of the Build action. They must be removed before you can access the higher-level Pottery tiles.

## NETWORK ACTION

Performing the Network action allows you to place Link tiles, which expand your network and gain you access to new locations.

**To perform the Network action:**

- Discard any card from your Hand, and place it face up onto your Discard Pile.

**\*\*Exception:** Wild cards are placed back onto their Card Draw Area.\*\*

- Place a Link tile on an undeveloped line on the board **H**. The placed Link tile must be adjacent to a location that is a part of your network.

**\*\*Exception:** If you have no Industry or Link tiles on the board, you may place a Link tile on any undeveloped line (you must still consume coal if building a rail Link).\*\*

## Network During Canal Era:

- You may not build rail Links.
- You may build canal Links on undeveloped canal lines **I**.
- You may build a maximum of 1 canal Link for £3.

## Network During Rail Era:

- You may not build canal Links.
- You may build rail Links on undeveloped railroad lines **J**.
- You may build 1 rail Link for £5.
- You may build a maximum of 2 rail Links for £15, if you also consume 1 beer. This beer must be consumed from a Brewery (not a Merchant beer).  
**Remember:** If consuming beer from another player's Brewery, it must be connected to the second rail Link (after it is placed).
- You must consume 1 coal for each rail Link built (see "Consuming Coal").  
**Remember:** Each rail Link is placed separately and must be connected to a source of coal (after it is placed).



# TIPS AND VARIANTS

## THINGS TO REMEMBER

- Discard 1 card for every single action you perform, including passing.
- You can perform the same action twice in a turn. For instance, you may place only 1 canal Link with the Network action, but may use the Network action a second time to place another canal Link.
- During the Canal Era, each player may place a maximum of 1 of their Industry tiles in each location.
- You may Overbuild any of your Industry tiles at any time.
- You may also Overbuild opponents' Coal Mines/Iron Works, but only when there are no coal/iron cubes left on any Industry tiles or in the Market.
- You must be connected to a  to sell cotton, manufactured goods, or pottery; and to consume coal (but not iron) from the Market.
- You do not need to be connected to consume your own Breweries' beer, but must be connected to other players' Breweries, or to Merchant beer (only available when selling).
- A location must be a part of your network for you to build there (unless you use that specific Location card or a Wild Location card).
- Unlike the other level 1 Industry tiles, the level 1 Pottery tile may be built during the Rail Era.

## BEGINNER TIPS

- Do not be afraid of taking loans. Your income level at the end of the game is not worth VPs. It is not uncommon for experienced players to win the game despite having a low income level.
- Level 2 or greater Industry tiles are not removed at the end of the Canal Era, so could score twice if built early. A flipped level 3 Cotton Mill would score a whopping 18 VPs over both eras. The Develop action is your friend.
- Be careful when developing Breweries. Remember that beer is required to perform the Sell action, so having no access to beer that belongs to you can be devastating to your long-term strategy.
- Tiles with a  to the left of their slot on your Player Mat cannot be built during the Rail Era. Try to build or develop at least 1 Coal Mine and 1 Iron Works during the Canal Era, so that you do not have to use a Develop action during the Rail Era to clear these industries from your Player Mat.
- Figuring out how best to expand your network at the beginning of the Rail Era can be difficult for beginners. Expand your network by building rail Links to sources of coal. If you don't have access to any coal, build a Coal Mine.

## INTRODUCTORY GAME

Since Brass is such a deep game, some players may prefer to play a shorter introductory game for their first experience. The introductory game plays exactly like the full game, except you only play the **Canal Era** and there are additional scoring rules to make players' scores more closely reflect their success in the Canal Era.

To play the introductory game, first, play the entire Canal Era as normal, including the end of Canal Era scoring.

Players then score additional points as follows:

- 1 Money**  
Score 1 VP for every £4 in your player area (up to a maximum of 15 VPs).  
 = 
- 2 Income level**  
Score VPs equal to your income level. If your income level is negative, you lose VPs.  
 = 
- 3 Industry tiles**  
Score the points a second time for all your level 2 or greater Industry tiles.  
 x2

