Lancashire became the centre of the cotton industry in this period, through the inventiveness of Crompton, Arkwright, and Watt among others. Steam power was combined with new machines, cotton mills were built, and mines were sunk to greater depths to provide the coal for these energy hungry contraptions. Moving coal required canals, then railways, and so the circular dance continued with innovation leading to innovation.

‘Brass’ is my attempt to tell a little of this story in game form. The name comes from the saying ‘where there’s muck there’s brass’, (said with a thick Yorkshire accent), brass being a local term for money.

This game should contain:
- 1 Gameboard
- 1 Rulebook
- 4 Counter sheets
- 8 Player wooden discs
- 66 Cards
- 30 Black coal cubes
- 25 Orange iron cubes
- 1 Black marker
- 100 Plastic coins
- 7 Plastic storage bags

Each player should have:
- 12 Cotton Mill counters
- 8 Port counters
- 7 Coal Mine counters
- 6 Shipyards counters
- 4 Iron Foundry counters
- 14 Canal/Rail counters
- 2 Victory Point counters
- 2 Wooden discs

There are also:
- 12 Distant Market tiles

Overview
Welcome to eighteenth century Lancashire. The world is about to change from something we would call almost medieval to what we now know as the modern world. This change will be called the *Industrial Revolution*, although it will take historians a while to come up with that term.

Brass is a game for three or four players and takes around two hours to play. The game is divided into two periods, the Canal Period, and the Rail Period. Each period is divided into a number of phases. The Action Phase is central to each period. You will have a hand of cards which you will use to build different industries and the transport links between them. Victory points are scored for industries that are making a profit, with the winner being the player who scores the most victory points. The rules have been structured to help you set up a game as quickly as possible. The main rules have been kept as brief as possible, while the Reference section at the back gives further details and examples of play.

Components

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- 2 Victory Point counters
- 2 Wooden discs

There are also:
- 12 Distant Market tiles

Industry counters

Player counters

Each counter is double-sided. Industry counters should always initially be played on the board on their front side. They become flipped when certain conditions are met.

Front

Back

Requires iron

Requires coal

Can only be built in Canal Period

Can only be built in Rail Period

Cost

Income

Victory Points (VPs)

Number of coal cubes placed on counter

Number of iron cubes placed on counter
The main map is referred to as Lancashire in the rules.

- Place cards here
- Cost of canal and rail links
- Coal and Iron Demand Tracks
- Locations with gold circles increase the value of connected canal and rail links
- Virtual connection between Liverpool and Birkenhead
- Potential canal link
- Potential rail link
- Income/VP track
- Order of Play display
- Amount Spent boxes
- Location card
- Industry card
- Location, in this case consists of three spaces
- Cotton Demand track. Place the black Cotton Demand marker in the top space
- Symbol inside space shows what can be built in it
- External location
- Place Distant Market tiles here

The board
Starting the game

Each player should select a set of counters and wooden discs. Each player should place one of their wooden discs on the £0 space of the Income/VP track.

Income/VP track with disc on starting space.

You should keep your Victory Point (VP) counters to one side as they will not be needed until the end of the first period.

You must arrange your Industry counters into piles of the same type. In each pile the counters should be ordered by Tech Level, with the lowest Tech Level on top and the highest Tech Level at the bottom.

EXAMPLE: When arranging your cotton mills you must make sure all of the Tech Level 4 mills go at the bottom, with the level 3 mills on top of them, then the level 2 mills, with the level 1 mill on top of the stack.

Place one black coal cube in each space on the Coal Demand track. Place one orange iron cube in each space on the Iron Demand track. Place the remaining cubes by the side of the board to form a stock.

Place the black marker on the top space of the Cotton Demand track.

Shuffle the Distant Market tiles and place face down in the space marked ‘Distant Market Tiles’.

Randomly determine the first player in a manner of your own choosing. The order of play should go clockwise from that player in the very first turn. Mark the order of play on the Player Order display, using a wooden disc from each player.

The plastic money counters should be placed in a bank by the side of the board. Each silver counter is worth £5, while each copper counter is worth £1.

Each player starts with £30.

You are now ready to start playing the game.

Playing the game

The game is divided into two periods, the Canal Period and the Rail Period. Each period consists of the following phases:

1. Cards
2. Player actions
   - Collect income
   - Play cards in player order
   - Determine play order for next round
   - Refill hand
3. Victory Points
4. New Period

The game will end at the end of the Rail Period.

Phase 1. Cards

Shuffle all of the cards together. Deal out eight cards to each player. Now remove the following number of cards from those remaining in the deck:

Four Players – in the Canal Period remove 6 cards, in the Rail Period remove 2 cards.

Three Players – in the Canal Period remove 9 cards, in the Rail Period remove 6 cards.

Without revealing them, place these cards to one side. The remaining cards are placed face down in the box indicated on the board.

Phase 2. Player actions

The Player Action phase consists of a number of rounds, which varies depending on the number of players. With four players there will be eight rounds in each period. With three players there will ten rounds in each period.

Each round of play consists of the following steps:

- Collect income
- Play cards in player order
- Determine play order for next round
- Refill hand

Repeat the sequence above until all players have played all of their cards.

STEP Collect income

The position of your wooden disc on the Income/VP track shows how much money you take from the bank. If your income level is negative then you have to pay that amount into the bank. If you do not have enough cash in hand to pay this then you must remove one of your Industry counters, (your choice), from the board. You collect an amount of money equal to half, rounded down, of the cost of building this counter. You then use this money to pay for your negative Income Level. It may be necessary for you to remove more than one Industry counter from the board. You start the game with zero income!

Income level

Whenever you flip an Industry counter to its other side you immediately move your Income marker a number of spaces up the Income track equal to the value in the gold circle. When you can flip a counter depends on its type, which will be explained in more detail later. Your Income Level is reduced every time you take a loan. You can never go above £30 income.

STEP Play Cards

In player order each player completes one set of actions. Each player completes their set of actions before play passes to the next player. Once each player has completed one set of actions this step is complete.
One set of actions consists of playing one card, then performing one action with that card, then playing a second card and performing a second action with that card. Thus each player will play two cards in all and perform two actions during their turn.

**EXCEPTIONS:** On the very first turn of the Canal Period you only play one card. You can combine two actions into one (see below). All cards played should be placed on the discard pile.

Each card allows you to perform one action. The available actions are:

- **Build industry**
- **Build canal or rail link**
- **Development**
- **Sell cotton**
- **Take loan**

You can also choose to not perform an action, but you still discard the card you played. You may repeat the same action.

The type of card you play only has an effect on your options if you choose to Build Industry.

### Action: Build Industry

To be able to build an Industry counter in a particular location you must:

a) have played a card that allows you to build there,

b) match the symbol in the space with the Industry counter you intend to build,

c) be able to move coal to that location if needed,

d) take an iron cube if needed,

e) be able to pay the full amount for the counter, which may include additional costs for taking cubes from one of the Demand tracks.

### Playing the right card

There are two types of cards, Location cards and Industry cards.

A Location card allows you to build at that location.

An Industry card allows you to build that type of industry BUT only in locations that you are connected to. In the Canal Period you can build in any location that you are connected to by your own canal links. In the Rail Period you can build in any location that you are connected to by your own rail links or where you already have an Industry counter. If you play an Industry card as your very first ‘build’ card then you can build in any space that matches the symbol on the card.

**IMPORTANT:** There is a ‘virtual’ connection between Liverpool and Birkenhead which acts in the same way as an owned canal/rail link. It cannot be used to move coal along or sell cotton.

### Matching the symbol

Each location is made up of a number of spaces. Each space contains one or two industry symbols. In all cases the counter you build must match one of the symbols in the space that you build in.

### Moving coal to build an Industry counter

If the Industry counter you wish to build has an orange cube on it then you must take one iron cube from somewhere. If possible you must first take it from an iron works in Lancashire, which may belong to another player. You do not need to be connected to the source by canal/rail links. You do not need to take it from the closest source. If there are no cubes in Lancashire then you can take a cube from the Iron Demand track. This will cost an additional amount, as indicated. If there are no cubes left on the Iron Demand track then you can pay £5 to take one from the stock. After taking the cube place it back in the stock.

If you take the last cube from an iron works then you flip the counter to its other side. The owner of the counter immediately moves his income marker a number of spaces along the Income Track equal to the value shown in the gold circle. You never have to pay another player to take iron from their counter.

### Paying for an Industry counter

You must pay the full cost of the counter plus any additional amounts for coal and iron, as explained below. This money must be placed in your ‘Amount Spent’ box.

### Further restrictions on building

There are a number of further restrictions on what you can build and where you can build it.

You must always build the top Industry counter from one of your five stacks of counters.

You cannot build an Industry with a Tech Level of zero. Any counter with a Canal symbol on it can only be built in the Canal Period, ie, you cannot build Tech Level 1 counters in the Rail Period. Any counter with a Rail symbol on it can only be built in the Rail Period.

Each space in a location can only contain one counter. In the Canal Period each player can only have one Industry counter in a location. In the Rail Period the only limit to the number of counters you can have in a location is the number of eligible spaces available.

When you build a counter you always place it face-up.

### Cotton mills

Cotton mills produce textiles, which you can then sell via a port. Selling cotton is an action and results in the counter being flipped to its other side.

### Ports

Ports allow cotton mills to sell their produce. When a port is used to sell cotton it is flipped to its other side. You can also take coal from the Coal Demand track via a port.

### Coal mines

Coal mines are sources of coal cubes. When you build a coal mine you place a number of coal cubes on it, as indicated on the counter. A coal mine is flipped to its other side when all of the cubes on it have been removed.

**IMPORTANT:** If at the point at which you build your mine it is connected to a constructed port then you MUST immediately move coal cubes from it to fill any empty spaces on the Coal Demand track. For each empty space you fill you take an amount from the bank equal to the amount shown to the left of the space. You fill the track from the bottom upwards. This money is taken after you have paid for building the coal mine, it cannot be
used to pay for the coal mine. Note that if your coal mine is not connected to a constructed port when built but then becomes connected in a later turn you do NOT move cubes from it to the Coal Demand track.

**Iron works** Iron works are a source of iron cubes. When you build an iron works then you place a number of iron cubes on it, as indicated on the counter. An iron works is flipped to its other side when all of the cubes on it have been removed.

**IMPORTANT:** At the point at which you build an iron works you must move cubes from it to fill any empty spaces on the Iron Demand track. You do not need to be connected to a port to do so. You take an amount of money from the bank for each cube you place on the track, in the same way as coal.

**Shipyards** Shipyards have no special function, they are simply a good way to gain victory points. As soon as you build a shipyard you flip it to its other side. Note that in the Canal Period you will only be able to build a shipyard in Liverpool as Birkenhead and Barrow-in-Furness are only served by rail links.

**Building over Industry counters** You can always build in a space already containing one of your counters as long as the new counter is of the same type and has a higher Tech Level. The old counter should be removed, along with any cubes on it.

You can build on top of another player’s coal mine with one of your own only if there are no coal cubes in Lancashire or on the Coal Demand track. Your coal mine must have a higher Tech Level then the one you are replacing.

The above rule applies to iron works, you can replace one if there are no iron cubes left in Lancashire or on the Demand track.

Income Levels are never reduced due to the removal of an Industry counter.

**Combining actions** You can combine your two actions into one action. In this single action you can build in any available space in Lancashire. You must still abide by all of the rules concerned with building an Industry counter. You must still play two cards.

**ACTION** Build canal/rail link

The particular card you played before selecting this action has no effect on where you can build a link.

You can build a canal/rail link on any potential link that connects with one of your Industry counters or is connected to a location that you already have a canal/rail link running in to.

Canals can only be built on potential canal links. In the Canal Period the only links you can build are canal links.

Rails can only be built on potential rail links. In the Rail Period the only links you can build are rail links.

Canals and rail links should be moved via rail links to its final destination, and must be taken from Lancashire first if possible.

You can build a link from an External location that you are connected to.

You can build two rail links in a single action. This costs £15. You still need one coal cube per link built. You can never build two canal links in a single action.

**ACTION** Development

The particular card you played before selecting this action has no effect on what development you can perform.

As one action you can remove and discard one or two Industry counters from the top of your stacks. These can be from the same or different stacks. For each counter you remove you must also take one iron cube from the board. See the rules on Taking Iron to tell you where you can take cubes from. You can never add counters to a stack.

**ACTION** Sell cotton

The particular card you played before selecting this action has no effect on your ability to sell cotton.

You may sell cotton from any number of your face-up mills. Each mill must sell to a face-up port or a Distant Market. Treat each mill you sell from separately.

To sell to a face-up port your mill must be connected to it. Selling cotton to a face-up port flips both the mill and the port. You can sell your cotton to a port owned by another player, they cannot refuse you the use of it. You do not have to sell to the closest available port and you can trace a route through a face-up port to the one you wish to sell to.

To sell to a Distant Market your mill must be connected to a constructed port. A single sale involves you turning over the top tile on the Distant Market stack and moving the Cotton Demand marker down a number of spaces on the track, as indicated on the tile. If the marker has not reached the bottom space then you can flip your cotton mill. You then earn an additional amount of money for the sale as indicated at the side of the track. You do this every time you sell to this market. Place the tile you remove at the bottom of the stack. If the Cotton Demand marker reaches the bottom space then you do not flip your mill. No more cotton can be sold to the Distant Market by ANY player for the rest of the period and all Distant Market tiles should be removed from the box.

**ACTION** Take loan

The particular card you played before selecting this action has no effect on how much money you can take as a loan.

You may take a multiple of £10 from the bank, up to a maximum of £30. For each £10 you take you must move your wooden disc one Income band down the Income track. It is not possible to move below £10.

You cannot take a loan once the deck of cards has been exhausted in the Rail Period.

**STEP** Order of play

The order of play is adjusted according the amount of money each player has spent in this round, lowest amount spent playing first and highest amount spent playing last. The amount spent can be determined by counting the money in the Amount Spent boxes.

In the event of a tie the player in the tie who was earlier in the old play order is placed earlier in the new play order.

Now remove and return to the bank all of the money in the Amount Spent boxes.

**STEP** Refill hand

Each player brings his hand up to eight cards in all. If the deck is exhausted then no cards are taken. You still continue to play out the remaining cards in your hand. When all players have played all of their cards then the period ends and you move on to the next phase.

**Phase 3. Victory Points**

Each canal/rail link is worth a number of VPs equal to the number of gold circles in the two locations it connects. Each Industry counter has one gold circle on its rear side. Each external location has two gold circles. There are also two circles in Blackpool, Southport, and Northwich.

Each Industry counter is worth a number of VPs equal to the number in the hexagon. Only counters that have been flipped score VPs.

If it is the end of the Rail Period then players also score 1VP for every £10 cash they hold.
All players mark their total victory points on the Income/VP track using their Victory Point counters. Use the second counter if your score goes over 100.

Phase 4. End of Period

If you have just completed the Canal Period then remove all canals and Tech Level 1 Industry counters, along with any cubes on them, from the map. Canal counters are returned to the owning players. Those Industry counters that were removed are discarded. You do not reduce your income level when you remove a counter.

Shuffle all of the Distant Market tiles together to make a fresh stack. Place in the box provided. Move the Cotton Demand marker to the top space on the Cotton Demand track.

Now start the Rail Period. Note that you play two cards in the first turn of the Rail Period. Don’t forget to remove cards from the deck.

If you have just finished the Rail Period then the game has ended.

Ending the game

The game ends at the end of the Rail Period. The player with the highest victory point total is the winner. In the case of a tie the tied player with the highest Income Level wins. If there is still a tie then the player with the most cash in hand wins. If there is still a tie after that then determine the order of play for the next turn. The player who would’ve gone earlier in the order of play wins the tie.

Reference section

Actions When it is your turn you must play two cards, (the only exception is the very first turn of the game, when you play one card). Each card allows you to perform one action. The card you use to perform an action will only have an effect if you decide to build. If you use a card to perform a different action then you can think of it as discarding that card. Available actions are BUILD INDUSTRY, BUILD CANAL OR RAIL LINK, DEVELOPMENT, SELL COTTON, TAKE LOAN.

Amount Spent boxes You must place ALL of the money you spend during your turn in your Amount Spent box. You spend money when you build an Industry counter or take a cube from the Coal or Iron Demand tracks or build a link.

EXAMPLE: You wish to build a cotton mill. You play a Location card for Oldham. The mill you are building requires one coal. You can build in Oldham because the card you played matches the location AND you can move one coal cube to the location from the red player’s coal mine. Note that you could not move coal from your own coal mine as this is further away. You can move coal along any players’ links.

Birkenhead: You can only build a shipyard in Birkenhead if there is a constructed rail link leading to it to bring coal in. There is a ‘virtual’ link between Birkenhead and Liverpool. This acts like a constructed canal/rail link for the purposes of using an Industry card to build. It can be used by any player. You can never use this link to move coal or sell cotton. You can only build here in the Rail Period.

EXAMPLE: You play a Shipyard Industry card. This allows you to build in Birkenhead even though you do not own the rail link leading to that location, as you can trace a link directly from Liverpool to Birkenhead. You would still have to be able to move coal to Birkenhead, which means that the rail link between Birkenhead and Ellesmere Port would have to have been constructed.

Canals Some locations are connected by potential canal links. In the Canal Period you can only build canals. Canals cost £3 to build. You can only build canals on links connected to one of your Industry counters or another one of your canals. Canals serve to move coal, provide links to locations that you are already connected to by canal, even if you do not have an Industry counter there.

EXAMPLE: The example to the right shows where you could build canals if your first Industry build was in Liverpool. In later rounds you can build canals from locations that you are already connected to by canal, even if you do not have an Industry counter there.

Canal Period During the Canal Period if you build a link it must be a canal. You cannot build Tech Level 2 shipyards. You can only have one Industry counter in each location.

At the end of the period all canal and Tech Level 1 counters are removed from the map. This does not mean that canals have vanished, it is assumed that they are working at full capacity and thus rail links are required to cope with additional shipments.
Coal

Coal is represented by black cubes and is produced by coal mines. It is used to build certain types of industry counters and rail links. In all cases coal must be shipped by constructed canal or rail links. Coal can be shipped within the same location without the need for a canal or rail link. When you have to take a cube you have to take the closest one available in Lancashire, distance being measured in constructed links. If there are two or more sources that are equidistant then you can choose which you wish to take. Coal can be shipped through an external location. If there is no coal available in Lancashire, or you are not connected to a potential source, then you can take it from the Coal Demand Track but you must be connected to a constructed port to do so, as well as be able to afford the extra cost. You do not pay for coal if you take it from another player’s mine.

Coal mines

You can only build a coal mine in a space containing the coal mine symbol. When you build a coal mine you place a number of coal cubes on it equal to the number in the black box. You flip a coal mine when all of these cubes have been removed. Later coal mines require iron, which represents the use of steam pumps to sink deeper mines.

Combining actions

You can combine your standard two actions into one action. This action can be to build in any location on the board. In effect you have wasted one of your actions to change one of your cards into the Location card of your choosing. You still play two cards as normal. All other rules concerning building apply.

EXAMPLE: You wish to build in Colne but you do not have a Location card for that place, nor do you have a Cotton Mill Industry card, (or if you do you do not have a connection to Colne). You play a Manchester Location card and a Coal Mine Industry card. You declare that you wish to combine your two actions and that you are going to build a cotton mill in Colne. If the mill required coal you would still have to be able to move it to Colne along constructed links.

Connected

Two locations are connected if there is a continuous series of constructed canal/rail links between them. All spaces within a location are connected to each other.

Constructed Ports

A constructed port is any port counter in Lancashire. External locations are also regarded as constructed ports. It does not matter which side is showing on the port counter. A port space without a counter is NOT a constructed port and cannot be used for moving coal or selling cotton through.

Cotton Mills

You can only build cotton mills in spaces containing the cotton mill symbol. You can flip a cotton mill when you choose the Sell Cotton action and are able to flip a connected, un-flipped port as well. Alternatively you can attempt to sell to a Distant Market. Early mills are water-powered, which is why they do not need coal. Later they start using steam engines, which means a demand for coal, while the most advanced mills require iron as well.

Development

As a single action you can remove up to two Industry counters from the top of your stacks. You can remove counters from different stacks. Each counter that you remove requires you to take an iron cube from the board. Development allows you to get down to the higher Tech Level counters more quickly. The example below shows your counter stacks before and after development. Note that in this example you would already have built two cotton mills. Once you have removed a counter you can never use it.

Distant Markets

Instead of flipping a port when you sell cotton you can take a Distant Market tile instead. Your cotton mill must be connected to a constructed port, which may be an external location. You draw the top tile. It will have a value between zero and -4 marked on it. You move the Cotton Demand marker down the Cotton Demand track that number of spaces, e.g. if the tile was marked -2 then you would move the marker two spaces down the track. The tile should be placed at the bottom of the stack. If the marker is above the bottom space you can sell your cotton. You gain an additional amount shown next to the space. If the marker hits the bottom space then you do not flip your cotton mill. Your Sell action ends immediately. No more cotton can be sold via the Distant Market tiles for the rest of the period by any player. All tiles in the Distant Marker box should be removed and placed to one side. You can still sell cotton to ports in Lancashire in later actions.

Demand Tracks

The Coal and Iron Demand Tracks are an alternative source of those cubes when there are none available in Lancashire. When you take a cube from the track you must pay the amount to the left. To remove coal from the track the building that required it would have to be connected to a constructed port by constructed canal/rail links. If there is no more coal or iron cubes available on these tracks then you can still take a cube but it costs you £5. This cube is taken from the stock. You would still need to be connected to a port to take coal. When you build a coal mine you must ship coal to fill empty spaces on the Coal Demand track if it is possible for you to do so. The same case applies to iron, which can always be shipped to the Iron Demand track.

When you fill a space on this track you take an amount of money from the bank equal to the number on the left. You only do this after paying to build the counter. Coal and iron is only moved to the Demand Tracks in this way at the point of placing an Industry counter. You never fill up empty spaces with cubes from already constructed Industry counters.

The example above tells us that if you needed to take a coal cube from here it would cost you £2, while an iron cube would cost you £3. If you build a coal mine and it is connected to a constructed port then you would have to move three of those cubes to fill three empty spaces on the Coal Demand track. You would take £4 from the bank.
**External Locations**

There are three external locations, Yorkshire, the Midlands, and Scotland. These act as constructed ports and increase the value of canals/rails connected to them. You can trace a connection through an external location, e.g., if you build a canal between Colne and Yorkshire then you would be allowed to build a canal from Yorkshire to Rochdale. You can also move coal through an external location. External locations are not regarded as being part of Lancashire.

**Flipping Counters**

It’s important to get your counters flipped to their other side as this earns you income and scores you VPs. Cotton mills are flipped when you sell cotton. Ports are flipped when a player uses it to sell his cotton. A player does not have to own the port he uses to sell cotton. Coal mines and iron works are flipped as soon as all of the cubes from them are removed. Shipyards are flipped as soon as they are placed in a location.

It is the responsibility of the player who owns a flipped counter to increase his Income Level by the amount indicated in the gold circle.

The example above shows the front of a cotton mill. To flip it you would have to perform a Sell Cotton action and flip a port counter. After flipping the counter you would increase your Income level by the amount in the gold circle. The counter will also score you VPs at the end of the period.

**Income/VP Track**

The Income/VP track is used to record your Income level and the number of VPs you have scored. Each space contains two numbers, a victory point number and an income number. The spaces on the track are grouped into bands of the same Income value. When you move your disc back after taking a loan you move back in bands. When you increase your income you move forward a number of spaces.

**Increasing Income Level**

You increase your Income level every time one of your Industry counters is flipped to its other side. You move your wooden disc up the Income track a number of spaces equal to the amount in the gold circle. In the example below you have just flipped an Industry counter with a gold circle value of 5. You would move your disc five spaces up the track, as shown.

**Industry Card**

An Industry card has an industry symbol on it. If you use this card to build an industry then you must build the type shown on the card. During the Canal Period you must build in a location that you are connected to by your own canal links and where you do not already have an Industry counter. In the Rail Period you could build in a location where you already have an Industry counter or one that you are connected to by your own rail links.

**EXAMPLE**

You play a cotton mill Industry card. You already have a port in Preston and a number of canals built. You would be allowed to build your mill in Lancaster or Warrington/Runcorn, as they are the only two locations connected to your port by canals where you can legally build a mill. You could not build in Wigan as there is no Cotton Mill symbol in either of the spaces. You could not build in Preston because you can only have one counter in a location during the Canal Period. You could not build in Blackburn because you do not have a canal link running into that location, even though another player does have a canal link there.

**Iron**

Iron, represented by orange cubes, is produced by iron works. It is used to build certain types of Industry counters and allows players to develop their counters. It does not need to be shipped by canal or rail.

**Iron Works**

You can only build iron works in spaces containing the iron works symbol. When you build an iron works you place on it a number of iron cubes equal to the number in the orange box. You flip an iron works as soon as all of these cubes have been removed. Iron works do not produce raw iron, they represent the production of steam engines, tools, building materials etc. That is why the cubes are linked to the Development action, the use of iron machinery is the cutting edge of technology in this period.

**Lancaster**

If you build a port in Lancaster then you must use the left-hand box first, if it is empty. You cannot deliberately build in the right-hand box to deny somebody else the opportunity to build a cotton mill.

**Loans**

As an action you can take a loan. You can take either £10, £20, or £30. For each £10 you take you must move your disc one band down the Income track. You do not pay loans back. In the example below you have just taken a loan for £30, which would move you back three bands, as shown. You always move back to the highest numbered space in a band. You cannot take a loan once the deck has been exhausted in the Rail Period.
Locations There are nineteen named locations in Lancashire where you can build. Each location is made up of between one and four spaces. Each space will have one or two industry symbols in it, which dictates what type of industry can be built in it.

**EXAMPLE:** The example to the right is Manchester. Three of the spaces allow for either a cotton mill or a coal mine to be built in them. The fourth space can only have an iron works built in it.

Location Card A Location card names one of the locations in Lancashire on it. If you use a Location card to build an Industry counter then you must build it in the location named on the card.

If you played the Location card to the right then you would have to build in Manchester. You would have the potential to build either a cotton mill, coal mine, or iron works, depending on what spaces were available. Please note that you do not have to be connected to another of your counters via canal/rail to be able to use this card. You would still have to be able to move coal to the location if required.

Mersey Please note that there are two potential canal connections along the Mersey. You may wonder how you can build a canal in water. These represent the construction of port facilities and coastal ships that would’ve been used to handle goods.

Order of Play At the end of each round you need to determine the new order of play. This is done by comparing how much money each player has spent during the round. Hopefully you have remembered to place all the money you spent during the round into your Amount Spent box. The new order of play will go from the player who spent the least money to the one who spent the most. In the case of a tie the tied players keep their same relative positions in the order of play.

Rail Period During the Rail Period if you build a link it must be a rail. You cannot build Tech Level 1 Industry counters. Any such counters on your stacks stay there until you remove them using the Development action.

Selling Cotton Selling cotton is an action. You can sell as much cotton as you like in a single action. You can only sell cotton from your own cotton mills. The act of selling cotton allows you to flip the counter to its other side. To flip a mill you would also have to flip an un-used port counter to its other side. To do so the cotton mill would have to be connected to that port by constructed canals or rails. They do not have to be your own canal/rail links. You can flip a port counter belonging to another player. You can also sell cotton to a Distant Market, which is explained elsewhere. You can choose the order in which you sell from your mills, e.g. you could choose to sell to a port with one mill and then sell to a Distant Market with another mill. The order in which you do this is important as if you first sell to a Distant Market and there is no more demand then your selling action ends immediately.

Amount Spent

**EXAMPLE:** Red has spent £23, purple £6, green £6, and yellow £12. The order of play will change to the one shown on the far right. As blue and green were tied their relative positions have remained the same.

Preston If you build a port in Preston then you must use the top box first, if it is empty. You cannot deliberately build in the lower left hand box to deny somebody else the opportunity to build a cotton mill.

Ports A port counter can only be built in a space containing a port symbol. Ports are flipped when a player chooses to sell cotton to it.

Rails Some locations are connected by potential rail links. In the Rail Period players can only build rails. Rails cost £5 to build or you can spend £15 to build two rails in a single action. If you do so they do not have to be built so that they are connected with each other. You can only build rails on links connected to one of your Industry counters or another one of your rails. Each rail link you build requires one coal cube. This has to be brought to one of two locations you are building between. You decide which location you wish to bring the coal to. Note that this means you could build a link to an external location and then take the coal from the Coal Demand track.

**EXAMPLE:** In the example to the right the red player has built a rail link to Manchester. He can take a coal from the Coal Demand track as he is connected to a constructed port.

Shipyards You can only build shipyards in spaces containing the shipyard symbol. When you build a shipyard you immediately flip it to its other side. You start with Tech Level 0 shipyards. You will have to develop these, (see rules on Development), before you build Tech Level 1 shipyards. Only Tech Level 1 shipyards can be built in the Canal Period. Only Tech Level 2 shipyards can be built in the Rail Period. During the Canal Period you will only be able to build in Liverpool. In the Rail Period you will also be able to build in Barrow-in-Furness and Birkenhead, but only if they are connected to by rail links to allow coal to be moved to them.

Errata: Please note that the canal symbol has been accidentally left off the Tech Level 1 shipyard counters.

Tech Levels Each Industry counter has a Tech Level from zero to four. The level determines how they should be arranged in their stacks, going from lowest at the top to highest at the bottom. The higher the Tech Level the better the machinery in your industry. Tech Level zero counters cannot be built, which means you have to remove them by opting for the Development action. The only way to remove a counter from a stack is to build it or remove it through development.

This is how your stacks should look at the start of the game.
**Victory Points** At the end of each period you score victory points. VPs are scored for canal/rail links and Industry counters. Each canal/rail link is worth a number of VPs equal to the number of gold circles at either end of the link. The values in the gold circles are not relevant. The victory point value of each Industry counter is shown in the hexagon.

**EXAMPLE:** As the yellow player you would score 9 VPs for your canal network, (each individual score has been marked next to the link). Your two cotton mills, coal mine, and iron works would score you a total of 15 VPs.

The red player would score 3 VPs for his canals and 2 VPs for his Industry counters, note he does not score for his cotton mill because it has not been flipped.

**Guide to playing the game**

The part of the game that you will find hardest to understand is that concerned with what industries you can build and where you can build them. Once you have mastered this part of the game the rest is relatively simple. I wish there was a quick way to make the rules easier to understand, but I’ve not come up with one yet. The big problem is that you have to keep a number of factors in mind when building. You need to make sure the card you play will allow you to build in your intended location. This means making sure the symbols on the card, the counter, and the space are all the same. Industry cards are more complicated to use than Location cards, as you need to trace a connection to one of your other counters via your own canal/rail links. What then makes things doubly confusing is the fact that you may or may not need coal to build. Coal has to be shipped along canals/rails, which means you have to plan carefully. It probably makes sense to start by building industries that do not require coal, just to get used to the basic mechanics. Don’t worry about needing iron to build as this commodity does not require canals or rails to be moved to its final destination.

When you start the game do not try to be too ambitious, keep things simple. Your first action should be to build either a cotton mill or a port. If you build a cotton mill then try to build it as close to Manchester as possible. If you build a port then Liverpool or Preston are good places to start. To build that cotton mill you are either going to play a Location card, in which case you simply build in that location, or an Industry card. If you use an Industry card then you can build in any location with a cotton mill symbol, as you do not have any other counters on the map yet.

Once you have a counter on the map it’s a good idea to build a canal from it. Canals allow you greater flexibility in the use of your Industry cards. They can also earn you a reasonable amount of victory points.

Once you are used to building industries that do not require coal then you can start to build ones that do need coal. You need to plan carefully to make sure you are connected to a source of coal. Ideally this would be your own, but it’s not essential. Being close to a port or external location is always good as this gives you the opportunity to buy coal from the Coal Demand track.

With cotton mills you are looking to be connected to a port of some kind. Being connected to your own port is the best situation, as when you sell your cotton you can sell it to your own ports. The more cotton you can sell in a single action the better, as this is a more efficient use of your limited number of actions. However, if you delay selling too long you may find there is no market for your cotton. It helps to get your income up fairly soon as this gives you the opportunity to take a loan without having to go into negative income.

Cotton mills are certainly more profitable than ports. The advantage of ports is that they are cheap to build and never require coal or iron. They should be part of your portfolio of industries but I do not think they are the most important.

Once you have a few cotton mills and ports up and running you may consider going into iron. A good time to build an iron works is when a few cubes have already been taken from the Iron Demand track. This means that you can usually get some of the costs of the building back immediately, and you will also be closer to being able to flip your iron works to its other side.

Coal is not in great demand in the Canal Period. However, once the Rail Period starts it becomes crucial. Try to end the Rail Period with at least one coal mine with coal already on it, (and one that is not going to disappear at the end of the period). Such a mine will act as a centre for you to expand your rail network from in the Rail Period.

**Shipyards offer the promise of lots of victory points but are costly to build in terms of money and development actions.** You can decide to ignore them and still have a good chance of winning the game. However, if other players are also ignoring shipyards then they can suddenly become a good investment, as you will have no competition for the available build spaces.

You will need to do some development during the game. You want to make sure you start the Rail Period without too many restrictions on what you can build. It’s good to have a few Tech Level 2 industries on the board at the end of the Canal Period as these act as centres for you to expand from in the Rail Period. Remember that in the Rail Period you can have more than one counter in a location. The biggest problem you will have with building is getting coal. Being close to an external location or port is good as you can then take coal from the Coal Demand track.

As the cards only have an impact on one of the possible actions you can perform you may wonder why they are in the game at all. There is no simple answer, I just find the game works better with them than without them. The cards do limit where you can build but careful planning will allow you overcome any major limitations. It helps to look at your hand carefully at the beginning of the game and see if you have a group of locations that are close to each other. Having counters close to each other is generally a good thing as it usually means it’s easier for you to build up an efficient canal/rail network. Use the cards to plan your strategy. Be careful when using cards to perform other actions, try to make sure they are “useless” cards.

Brass is a long distance race. Do not be concerned if you are behind on victory points at the end of the Canal Period. There are many more points available in the Rail Period, and it’s common for the early leader to fall behind in the second period.
### Industry Counter Details

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Credits

Game designed by Martin Wallace
All artwork by Peter Dennis
Graphic design by Solid Colour
German translation by Ferdinand Köther
French translation by Ludovic Gimet
Playtested by the usual thousands, which includes Simon Bracegirdle, Andy Ogden, Don Oddy, Chris Boote, Martin Hair, James Hamilton, Dave Norman, Jerry Elsmore, Geoff Brown, and lots of kind folks at Stabcon, Baycon, Midcon, UK Expo, and the Conference of Wargamers.

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If you have any questions about these rules or wish to know more about other Warfrog products you can contact Martin Wallace at: martin@warfroggames.com

or check the website at: www.warfroggames.com

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