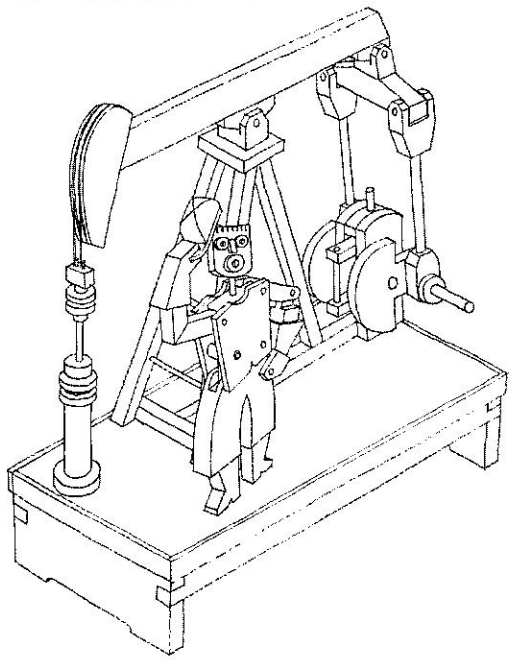


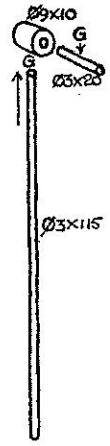
**Timberkits** Engineer Series

## Oilfield Pump Jack Instructions

Jenobi, Inc 10400 Westoffice Dr, #123, Houston, TX, 77042
sales@timberkitsus.com
www.timberkitsus.com
Tel: 713-953-1452

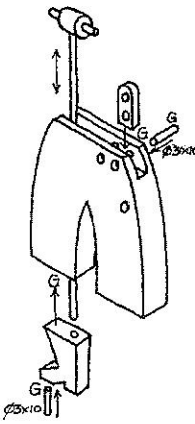
**1** Place bead of glue in centre of diam 3x20 peg and push through diam 9x10 **'T' End** so an equal amount sticks out each side.

With some glue on the end of diam 3x115 push into remaining hole of diam 9x10 **'T' End.**

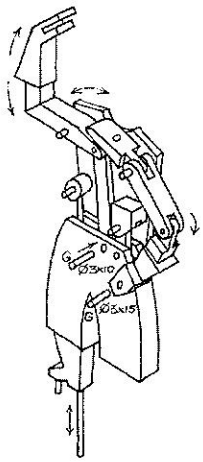



**2** Glue square end of **Lower Body Hinge** into slot in the top of the **Leg Unit** using diam 3x10 peg. Put the glue on the end of the peg as you push it in.

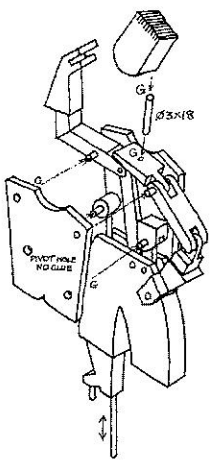
Glue diam 3x10 peg into hole at toe of boot. Apply glue to upper surface of boot and with the diam 3x115 pushrod from **1** in position through the leg unit, glue onto under surface of leg unit; take care not to get any glue into hole through the boot; the push rod must move up and down freely at all times.




**8** Place the hole in **Right Upper Arm** over diam 3x20 peg in right shoulder and with glue on 'following' end of a diam 3x10 peg push through hole in top of **Leg Unit** and **Arm Link.** In the same way put diam 3x15 peg through **Left Hand** into hole in **Leg Unit** so peg is secure in hand but will move freely in leg unit. When the diam 3x115 push rod is moved the upper body should tilt up and down and both arms should move.

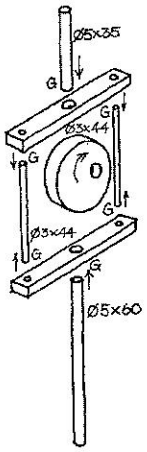



**9** With a spot of glue in three holes in the **Front Body Plate: NOT IN THE 'PIVOT HOLE'** - push **Front Body Plate** in place - do not make it too tight or the pieces will not move inside. Glue diam 3x18 peg into **Head Pivot.** The head can be put on but does not need to be glued yet. Glue on Eyes , Nose and Mouth



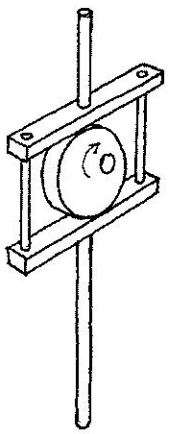

**10**

Glue diam 5x35 into one **Clasp Bar** and diam 5x60 into the other. Make sure the surface which will be in contact with the **Cam** is smooth and free from glue




**11**

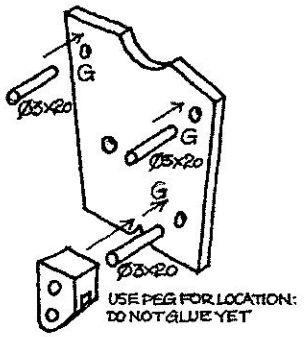
Glue in the two diam 3x44 **Spacer Rods** so that the **Clasp Bars** almost touch the outer surfaces of the **Cam** but allowing it to revolve freely



**Not suitable for children 3 years and under – small parts with risk of choking**

## 3

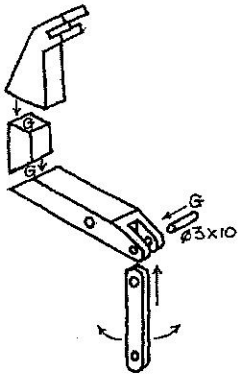
Glue diam 3x20 pegs into hole at shoulders. Glue **Upper Body Hinge** onto **Body Back Plate** using diam 3x20 peg for location and then remove it




## 6

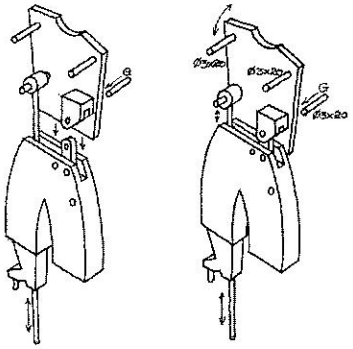
Assemble the right arm by glueing the **Right Forearm** to the **Right Upper Arm** at the elbow angle and the Right Glove to the Right Forearm - look forward to 8 to see the position for the glove.

With a bead of glue on the back end of the diam 3x10 peg push through the holes in the end of the **Right Upper Arm** and the **Arm Link** - there should be free movement between the two.




## 4&5

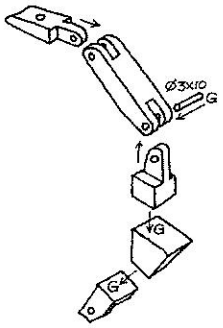
Put one end of the peg in the **'T' End** in the hole in the **Body Back Plate** and push the diam 3x20 peg through the two pieces of the body hinge; a bead of glue on the end of the peg will secure it in place. When the push rod is operated the **Body Back Plate** should tilt backwards and forwards



## 7

Assemble the parts of the left arm. Glue the **Left Hand**, **Left Gauntlet** and **Left Forearm** together. Look forward to 8 to see how these parts are positioned.

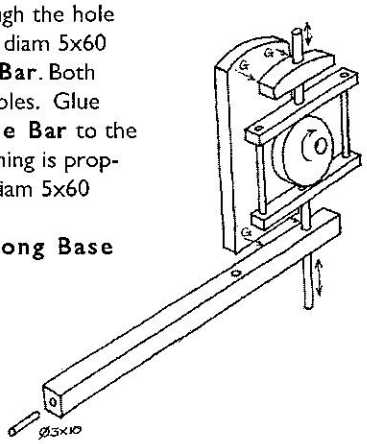
Using diam 3x10pegs with some glue on the rear ends, push into place to form the hinge joint between **Left Upper Arm** and **Left Forearm**. The hinge joint between the shoulder and **Left Upper Arm** is made by putting the tongue of the **Head Pivot** into the fork of the **Left Upper Arm** and placing them together over the diam 3x20 peg at the left shoulder. These hinge joints should swing freely




## 12

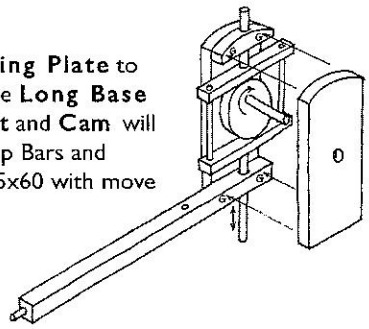
Slide the diam 5x35 through the hole in the **Top Slide** and the diam 5x60 through the **Long Base Bar**. Both should slide easily in the holes. Glue the **Top Slide** and the **Long Base Bar** to the **Bearing Plate**. Make sure everything is properly in line so that diam 5x35 and diam 5x60 slide up and down smoothly.

Glue diam 3x10 into end hole in **Long Base Bar**



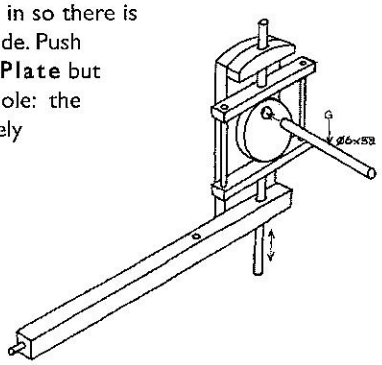

## 14

Glue the other **Bearing Plate** to the **Top Slide** and the **Long Base Bar** so that the **Shaft** and **Cam** will revolve freely and Clasp Bars and Diam 5x35 and Diam 5x60 with move freely.



## 13

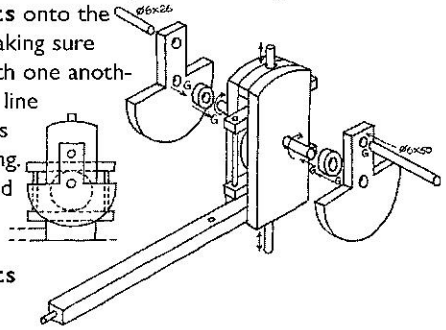
Insert diam 6x52 through the hole in the **Cam**. With a bead of glue in the centre of the **Shaft** push in so there is an equal length on each side. Push through the hole in the **Bearing Plate** but make sure no glue goes into that hole: the **Shaft** and **Cam** must revolve freely




## 15

With a little glue in the centres of the main diam 12x5 spacers push onto the shaft on either side of the **Bearing Plates**: leave a tiny space between the spacer and the **Bearing Plate**, then glue the **Counter Weights** onto the ends of the shaft making sure that they line up with one another. They should also line up with the **Cam** as shown in the drawing.

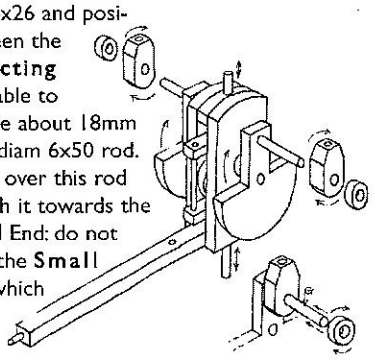
Glue diam 6x50 and diam 6x26 into remaining holes in **Counter Weights**



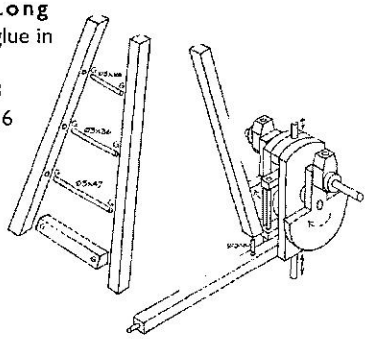

**Please turn over** ☞

**16** Place small **Connecting Rod Ends** over diam 6x50 and 6x26 rods.

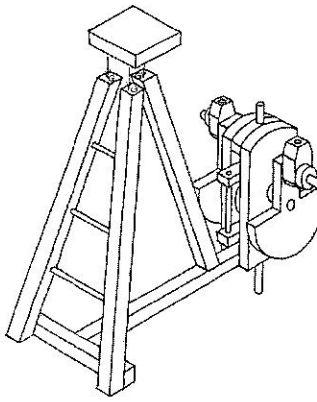
Put a bead of glue in a diam 12x5 spacer and place over the end of diam 6x26 and position with a small gap between the spacer and **Small Connecting Rod** End, which must be able to revolve freely. Put some glue about 18mm from the outer end of the diam 6x50 rod. Push the diam 12x5 spacer over this rod turning it round as you push it towards the **Small Connecting Rod** End: do not get any glue in the hole of the **Small Connecting Rod End** which must be able to revolve freely.



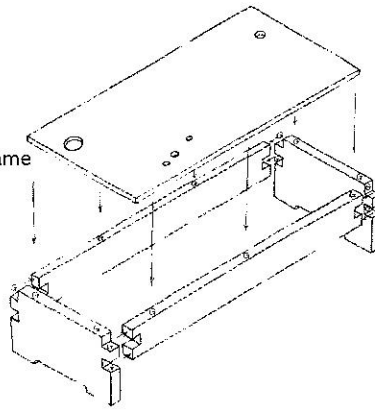
**17** Glue a diam 3x10 peg into the end of the **Back Support Leg** and glue into the **Long Base Bar**. With glue in the 3 holes of each **Front Support Leg** insert the 3 spacer rods (diam 3x26, 3x36 and 3x47) and glue onto **Base Cross Piece**. Glue the frame onto the end of the **Long Base Bar**.



**18** Glue **Top Plate** down onto the top ends of the **Front and Base Support Legs**.



**19** Assemble the base unit as shown making sure the holes are in the same position as in the drawing



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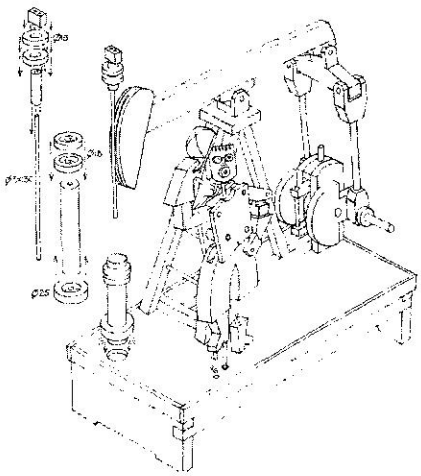
**23** Glue the **Well Head Rings** into position on the diam 12x64 **Well Head Cylinder**. The **Well Head Base Ring** should be glued to the Well Head Cylinder about 5mm up from the Bottom end.

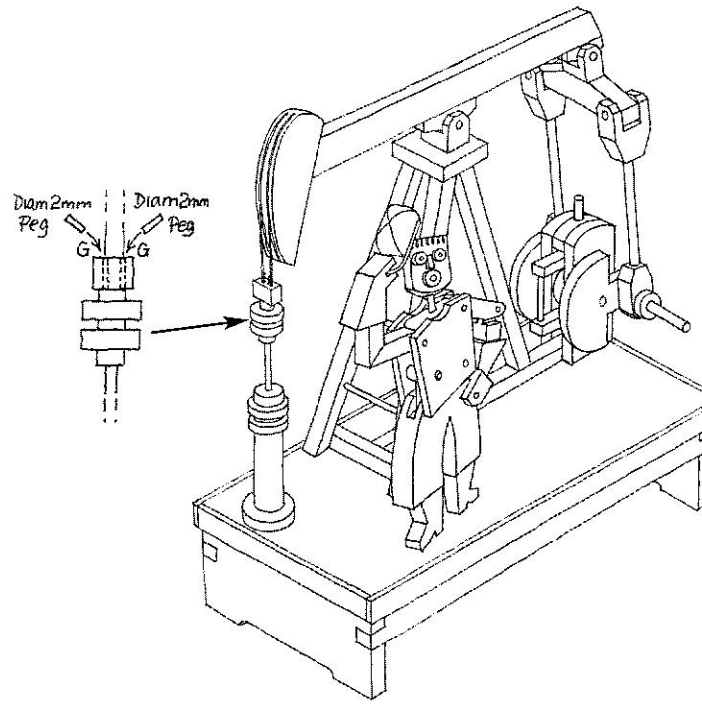
Glue the **Pump Rod Rings** onto the **Pump Rod End** and glue the diam 3x130 into it. Glue the **Top End Block** onto the end of the **Pump Rod End**.

With a diam 3x10 in the heel of the remaining **Boot** glue into position on **Top Surface**. Put the diam 3x115 rod through the middle hole and with glue in the remaining hole and on the top surface of the boot fix in position. Be sure that no glue gets near the diam 3x115 rod and check that it moves up and down easily.

Assemble the Hard Hat as shown. Put the peak between the fingers and thumb of the right hand. With his arm raised so that the Hard Hat is over his Head , glue the head onto the diam 3x18 at an outward turned angle and glue the peak of the hat into the hand so that it rests immediately above the head.

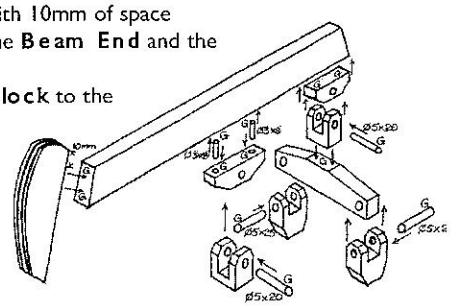


**24** Turn the handle and fully raise the **Beam End**. Glue a piece of thread in each groove of the **Beam End**. Lift up the **Pump Ro** until the **Top End Block** is just under the lowest end of the **Beam End**. The ends of the threads are secured in the **Top E Block** with 2 small diam 2mm pegs. Trim the threads so when they are inserted into the holes, the **Top End Block** is just below the bottom en of the **Beam End**. Glue each of the pegs into the holes to fix the thread



**20** **Glue Top Bearing Block** to the **Beam** using 2 diam 3x8 pegs. The end of the **Beam** which is the shortest distance from the **Bearing Block** will have the **Beam End** attached to it. Glue in place with 10mm of space between the top surface of the **Beam End** and the **Beam** as in drawing.

Glue the **Short Bearing Block** to the lower surface of the **Beam**.

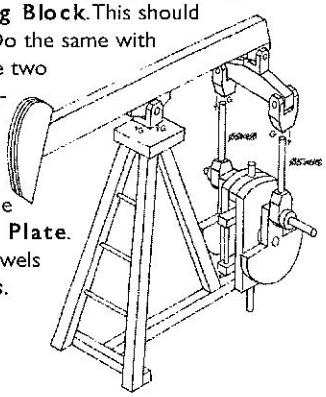


**21** Glue the **End Pivot** to the centre of the **Pull Bar**. With a bead of glue on the back end of the diam 5x20 peg, push through the **End Pivot** and **Short Bearing Block**. This should make a free moving hinge joint. Do the same with the **Top Pivot** and **Bearing Block**. The two **Large Connecting Rod Ends** are connected in the same way using diam 5x25 pegs.

Glue each of the diam 5x68 dowels into the **Small Connecting Rod Ends**. Glue the **Top Pivot** to the centre of the **Top Plate**.

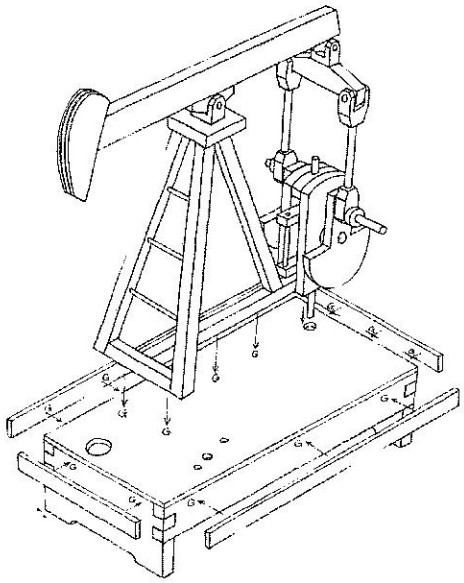
Glue the other ends of the diam 5x68 dowels into the **Large Connecting Rod Ends**.

When the handle on the front of the **Counter Weight** is turned the **Beam** should move up and down freely.

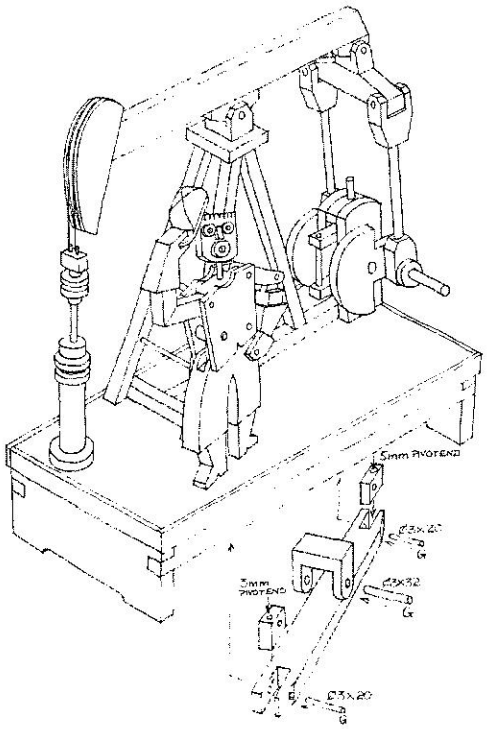


**22** Glue the **End** and **Side Cover Strips** in place with the top surfaces level with the **Top Surface** of the base unit.

Put glue on the under surfaces of the pump unit being sure not to get any glue near the diam 5x60 rod. Put the rod through the hole and place the pump unit on the **Top Surface**. The diam 5x60 rod should be in the middle of the hole so that it moves easily and the rest of the pump unit should be parallel with the back edge of the **Top Surface**.

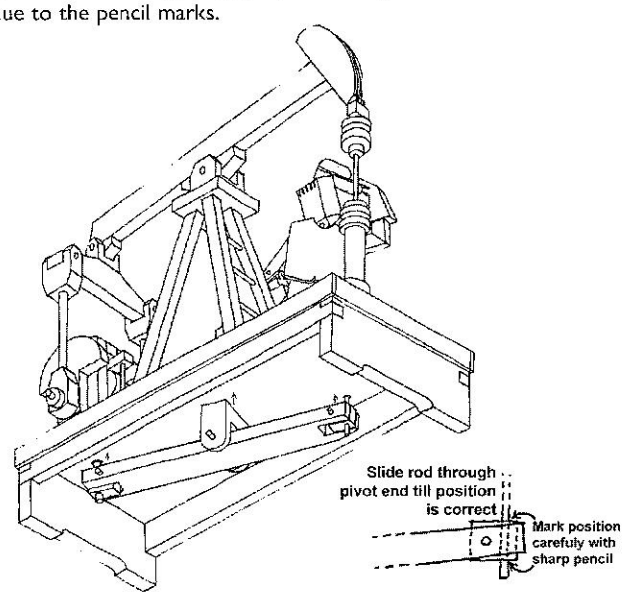


**25** Assemble the balance arm as shown using the usual method of a bead of glue on the back end of each peg. All parts must swing freely like hinges. Note carefully which end has the diam 5mm hole and which end has the diam 3mm. Also make sure you have the slopes in the right position. Slide the diam 3mm hole over the diam 3x115 rod and the diam 5mm hole over the 5x60 rod. These should both be easy fits. You may need to sand the rods to achieve this




**26** When you have an easy fit at both ends put glue on the base of the **Lever Arm Pivot** and slide up into contact with the underside of the **Top Surface**.

When the glue is dry push the diam 3x115 rod upwards as far as it will go so that the man has his hard hat above his head and his arm as far up as it will go. Now turn the pump so the diam 5x60 rod is in its lowest position by allowing the diam 3x115 rod to slide through the 3mm **Pivot End**. These are the positions the diam 3mm rod and the diam 5mm rod have got to be glued into their **Pivot Ends**, so mark them carefully with a sharp pencil. They can then be glued into position by sliding the **Pivot Ends** up and down and applying glue, then sliding them back over the glue to the pencil marks.



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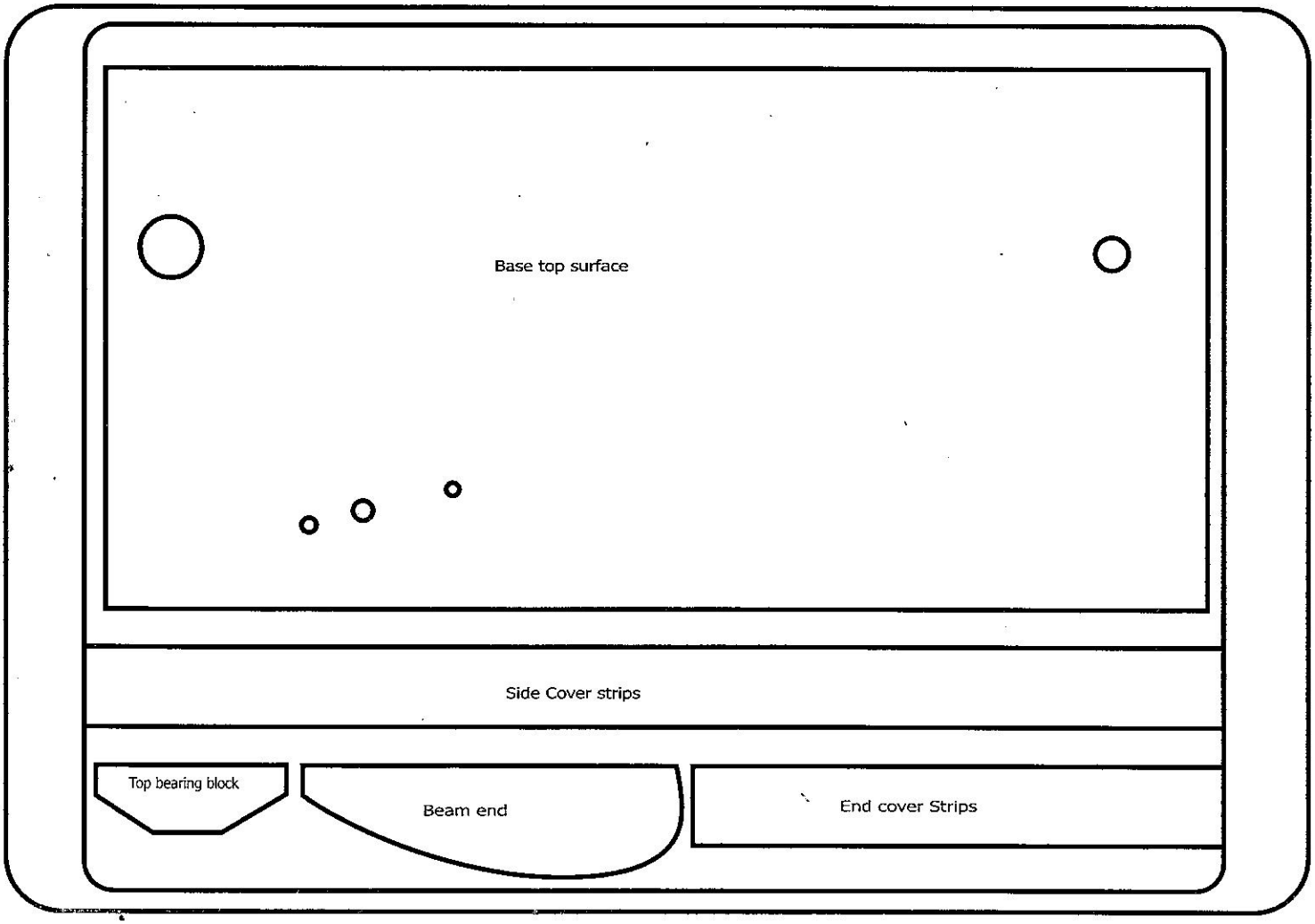


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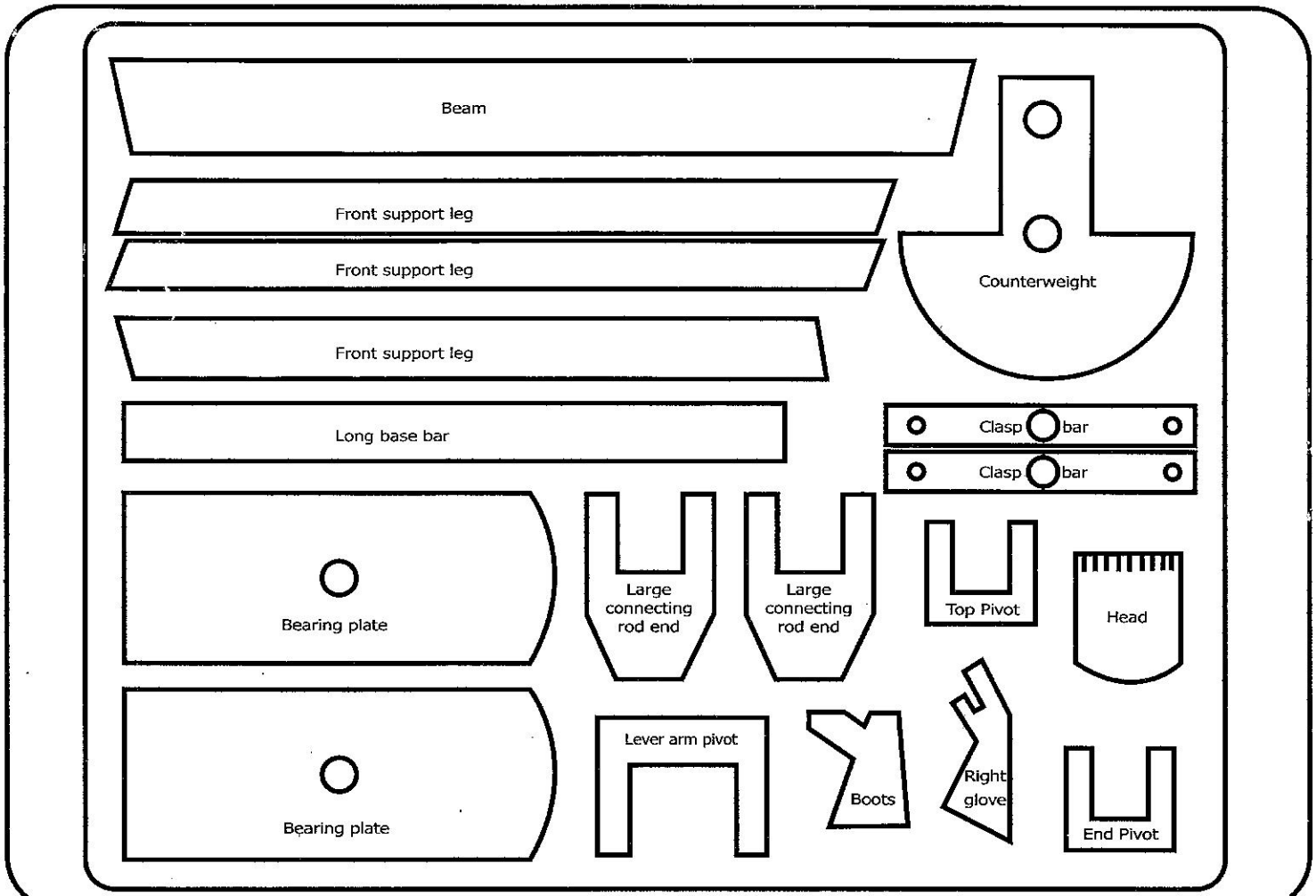

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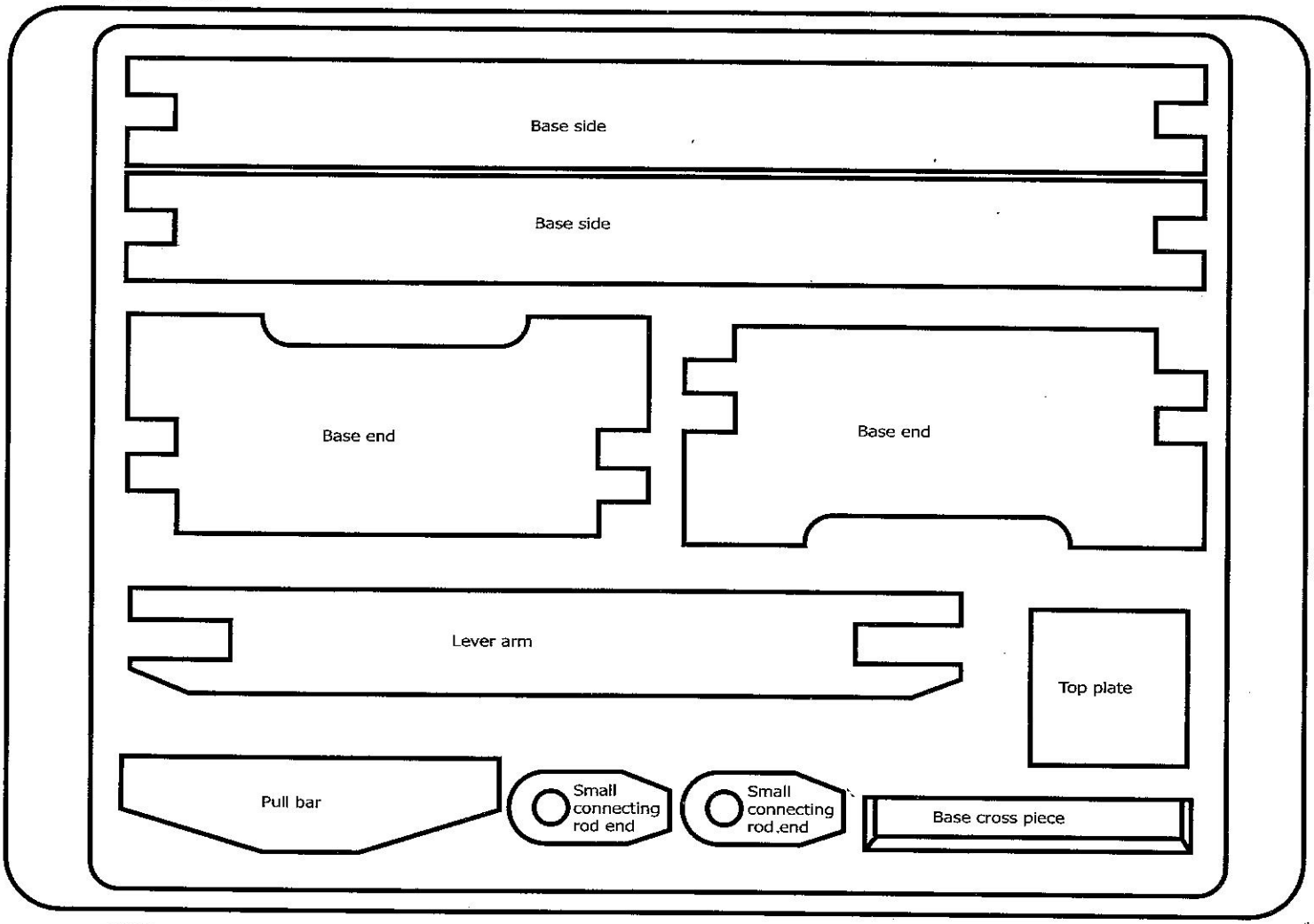


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