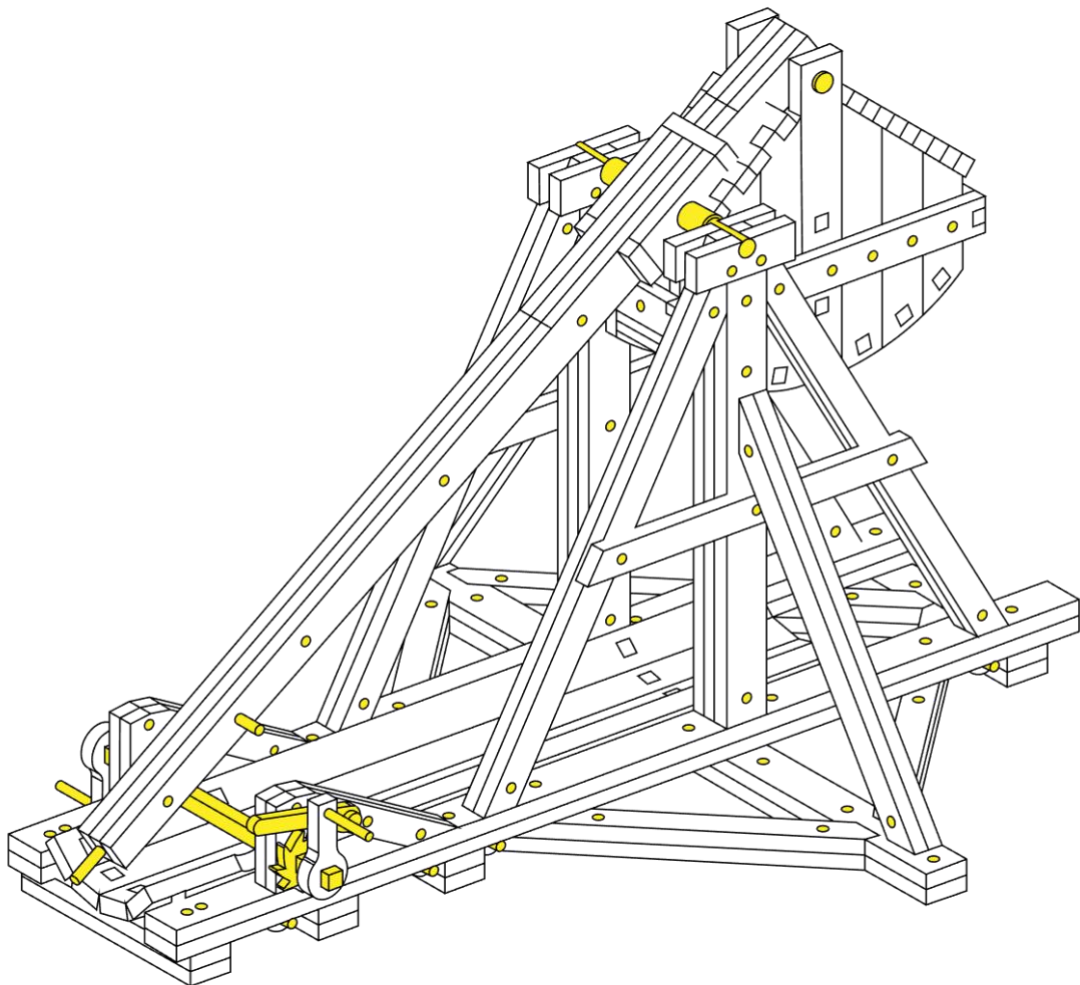


INSTRUCTION MANUAL

CLASSIC SERIES

SMALL TREBUCHET KIT

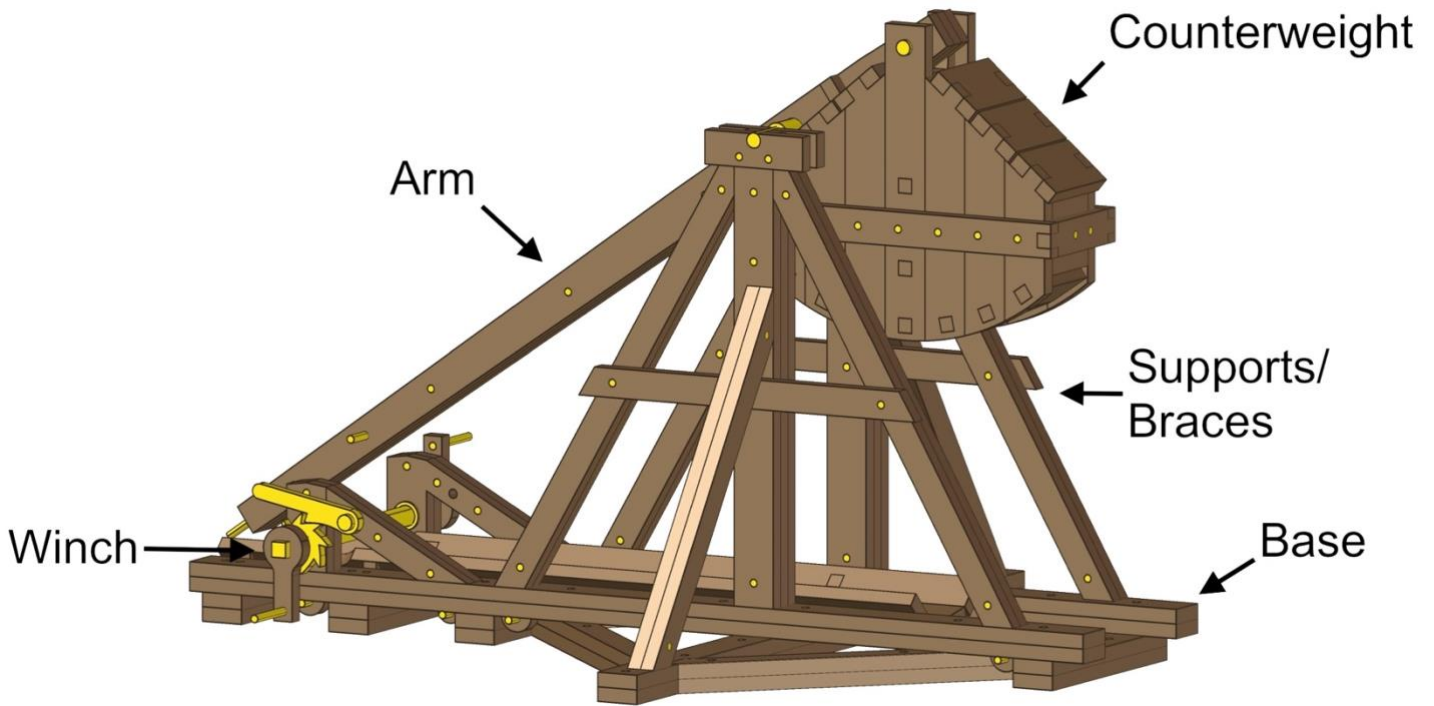


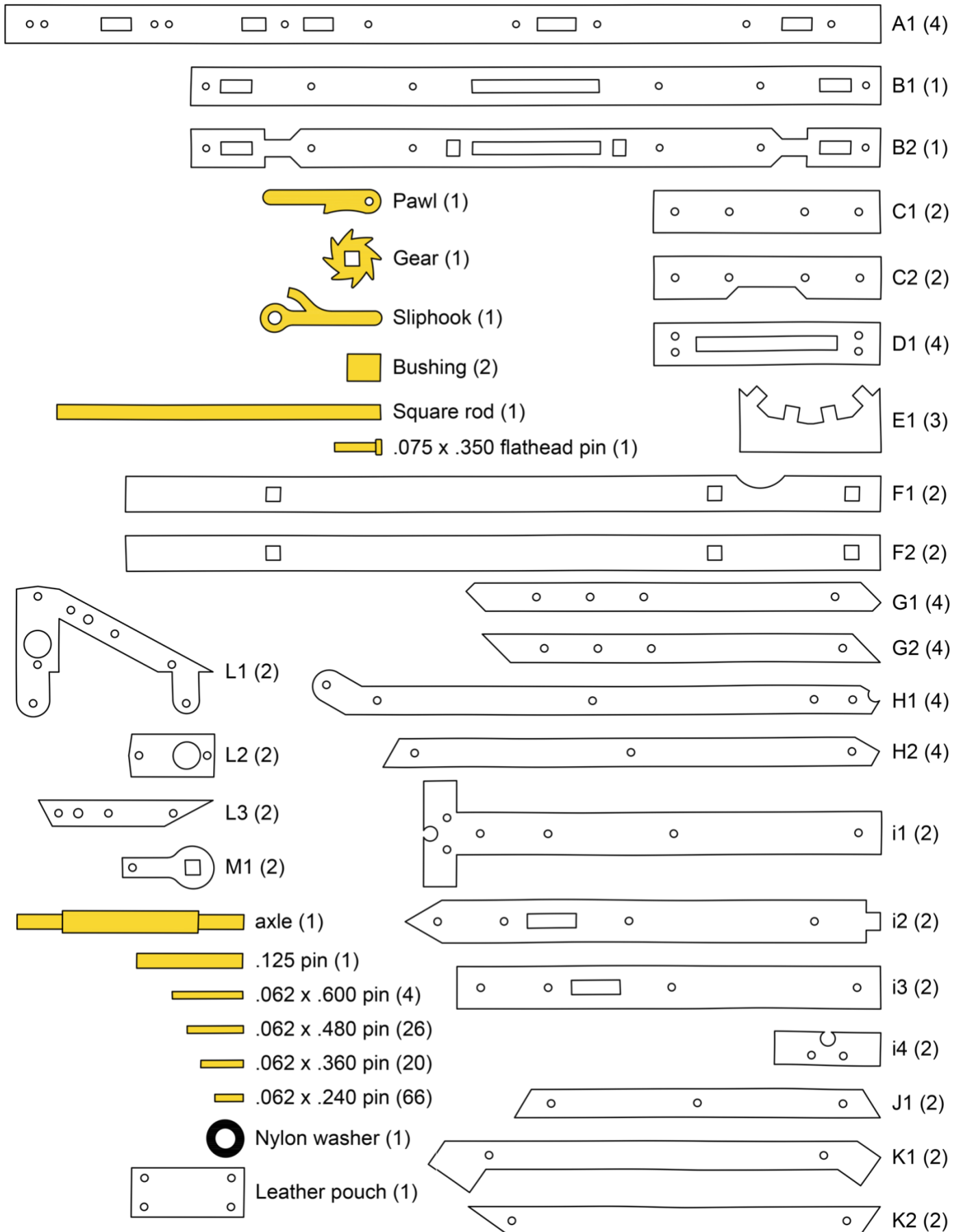
Warning

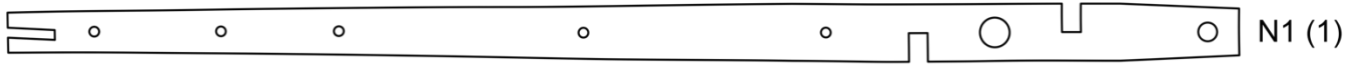
This kit contains small pieces. Keep away from children.
Do not aim at other people, pets, or yourself. Do not use this kit to launch sharp objects or anything that harms you or anyone else.

Table of contents

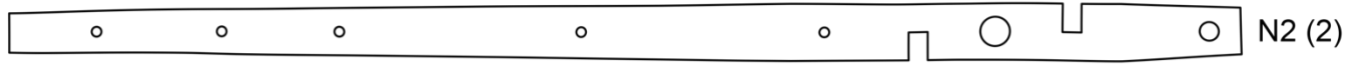
Section #	Name (est. time)	Page #
Section 1	Base (25 min.)	6
Section 2	Supports, Braces, and Winch (25 min.)	15
Section 3	Arm and Counterweight (15 min.)	25
Section 4	String (10 min.)	33
Section 5	Operation	37



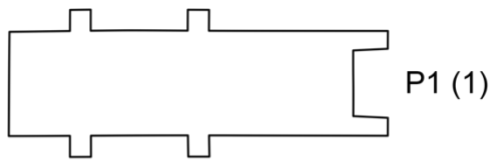




N1 (1)



N2 (2)



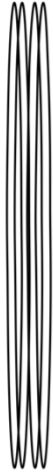
P1 (1)



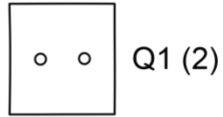
N3 (2)



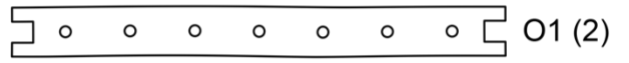
N4 (2)



String



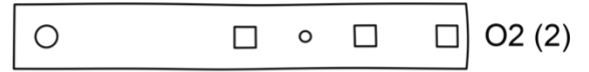
Q1 (2)



O1 (2)



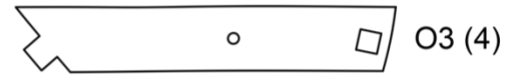
Q2 (2)



O2 (2)



R1 (7)



O3 (4)



S1 (6)



O4 (4)



O5 (4)

What's Needed:

- Hammer (for gently tapping brass pins into place)
- Scissors (to cut string)
- Superglue (to secure knots in the string)
- Counterweight material (steel BBs or lead shot recommended).

Tips before you get started:

- Lay out all the wood parts on the inventory list.
- Build the kit on a workbench or cutting mat to prevent damage to your table.
- Use a spare piece of wood to set the pins in place or lightly tap with a hammer.

Section 1 – Base

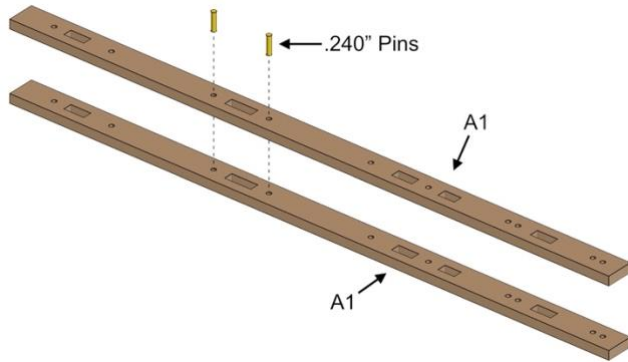


Fig. 1

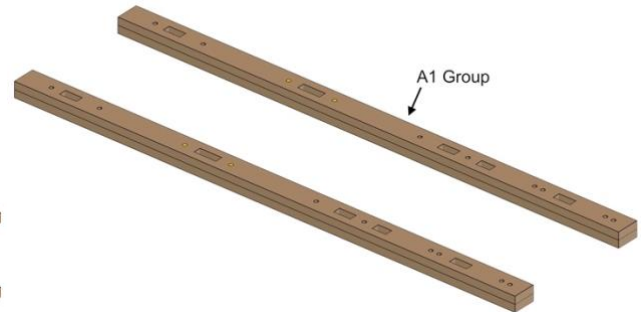


Fig. 2

- Align parts exactly as shown in *Fig. 1*.
- Insert two .240" pins.
- *Fig. 2* shows the completed process (make two parts).

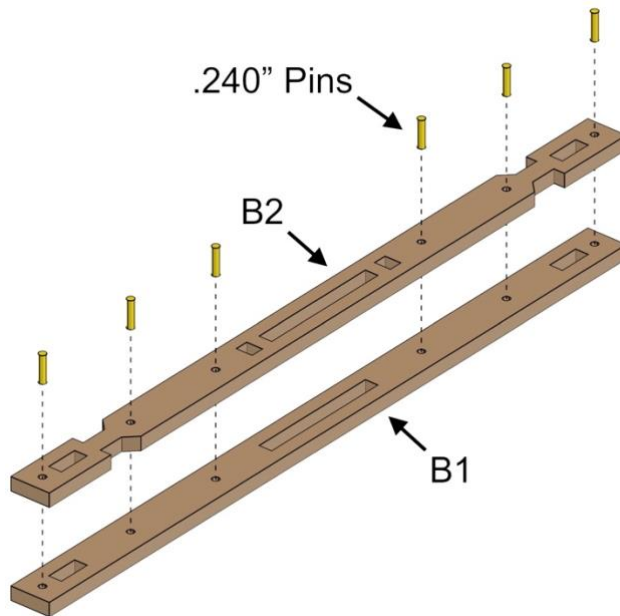


Fig. 3

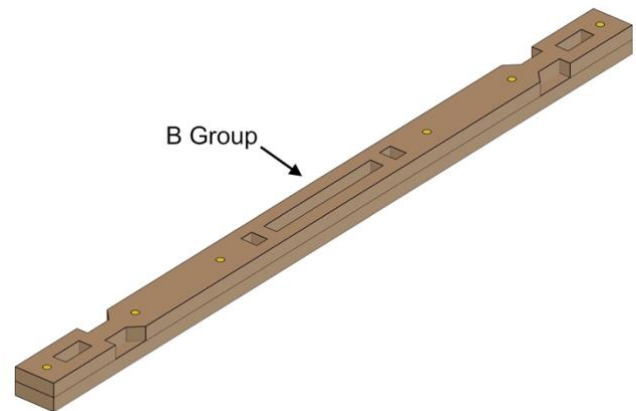


Fig. 4

- Align parts exactly as shown in *Fig. 3*.
- Insert six .240" pins.
- *Fig. 4* shows the completed process.

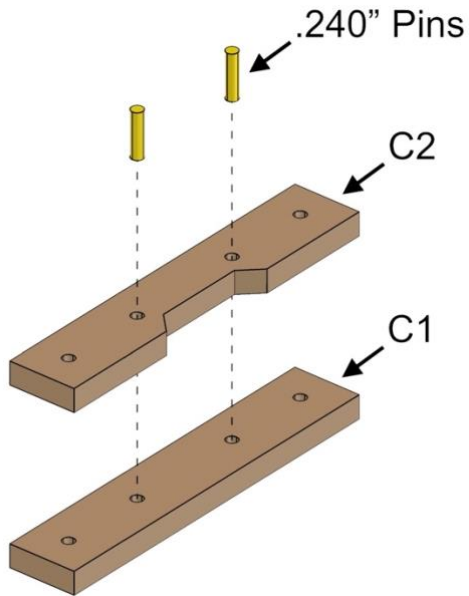


Fig. 5

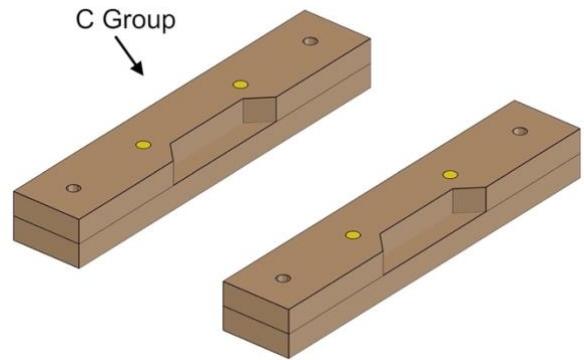


Fig. 6

- Align parts exactly as shown in Fig. 5.
- Insert two .240" pins.
- Fig. 6 shows the completed process (make two parts).

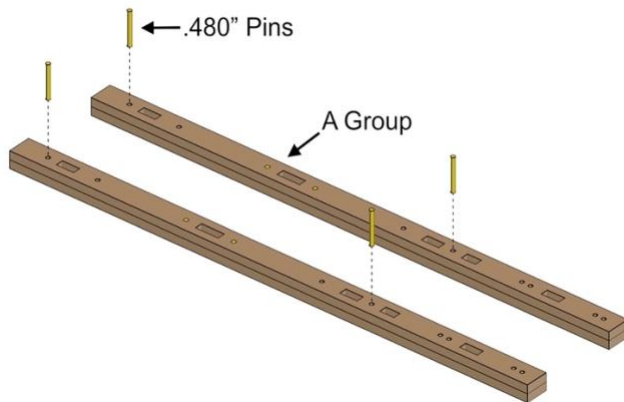


Fig. 7

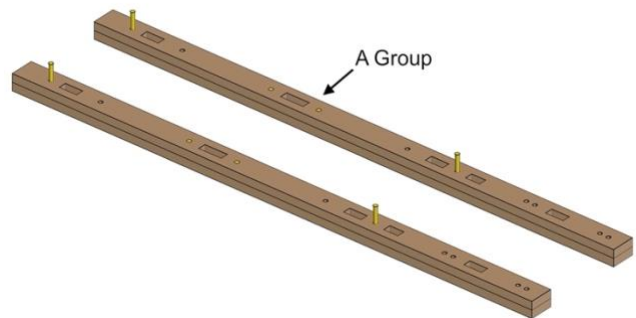


Fig. 8

- Align parts exactly as shown in Fig. 7.
- Insert four .480" pins.
- Fig. 8 shows the completed process.

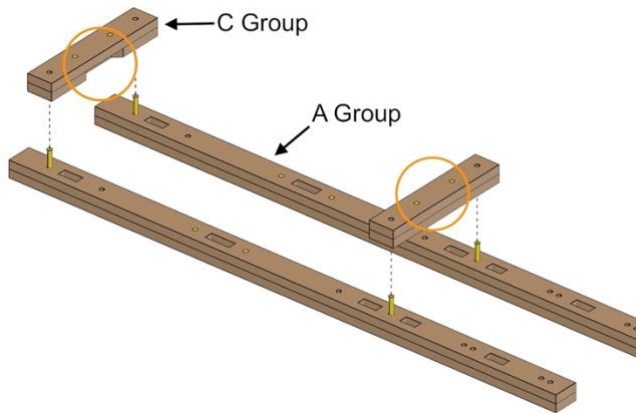


Fig. 9

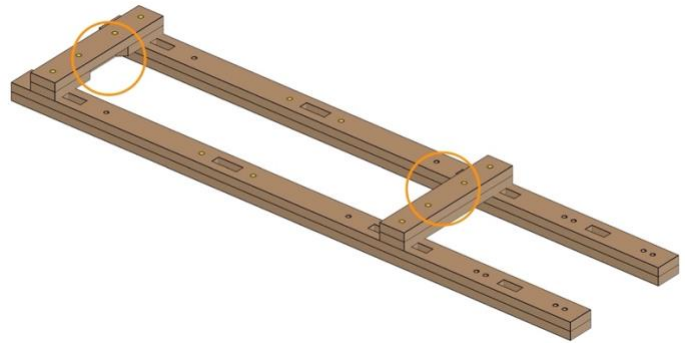


Fig. 10

- Align parts exactly as shown in *Fig. 9*.
- The orange circles highlight the correct orientation.
- Attach the C Groups onto the A Group.
- *Fig. 10* shows the completed process.

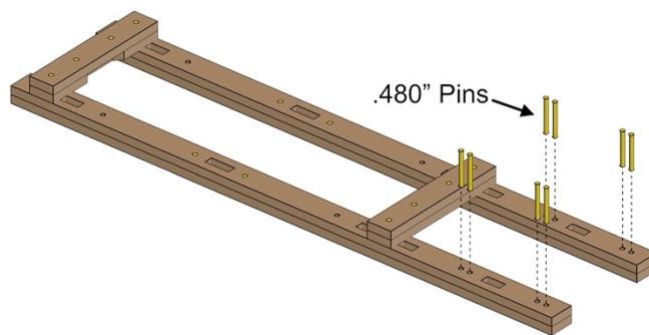


Fig. 11

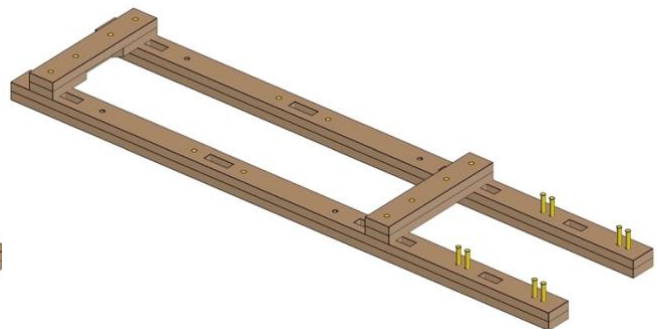


Fig. 12

- Align parts exactly as shown in *Fig. 11*.
- Insert eight .480" pins.
- *Fig. 12* shows the completed process.

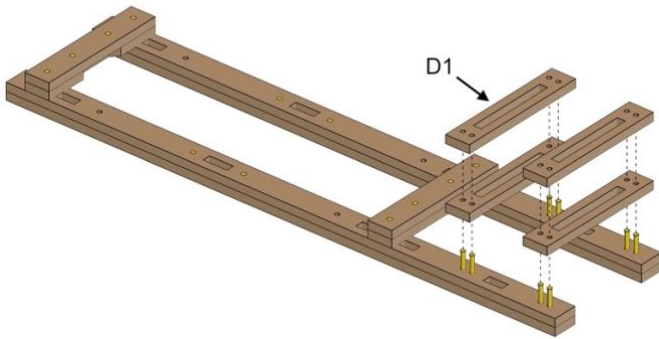


Fig. 13

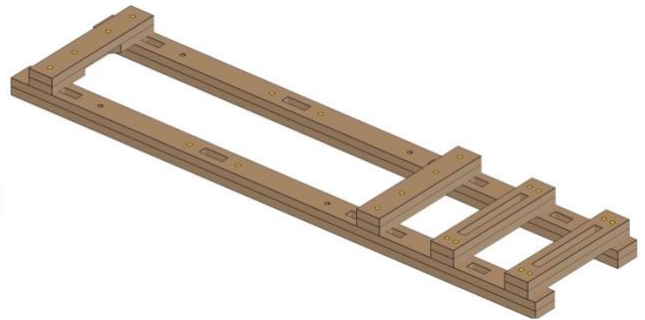


Fig. 14

- Align parts exactly as shown in Fig. 13.
- Attach four D1 pieces to the Base.
- Fig. 14 shows the completed process.

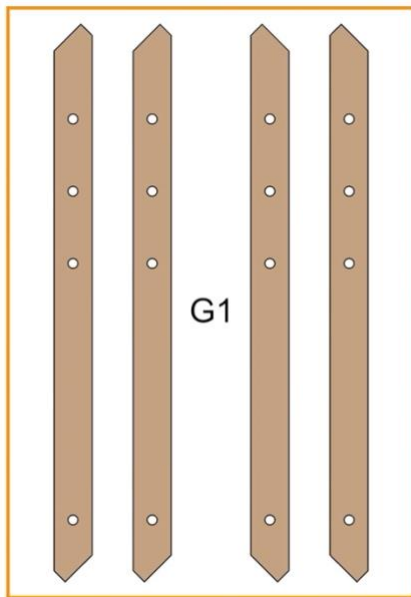


Fig. 15

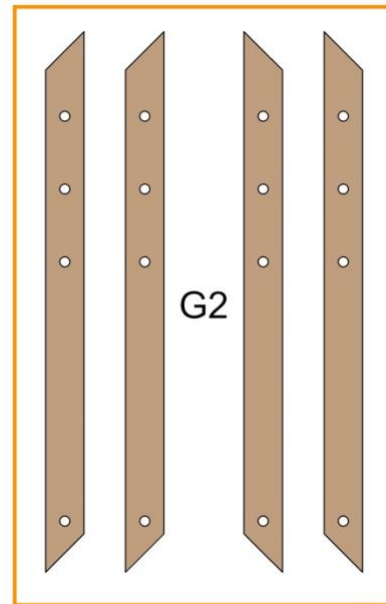


Fig. 16

- Lay all the G1 and G2 pieces flat on your table.
- Align the parts EXACTLY as shown in Fig. 15 and 16.

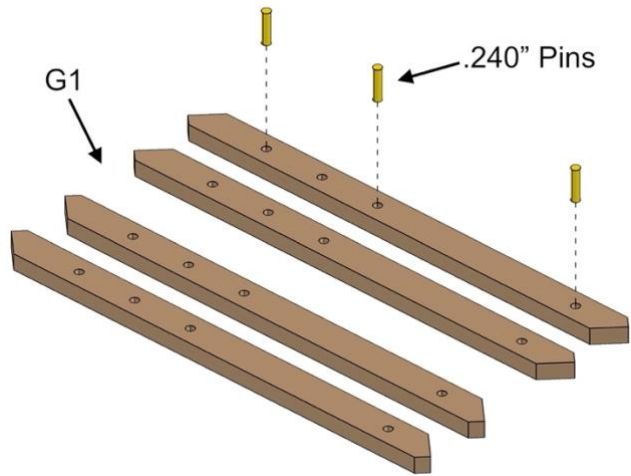


Fig. 17

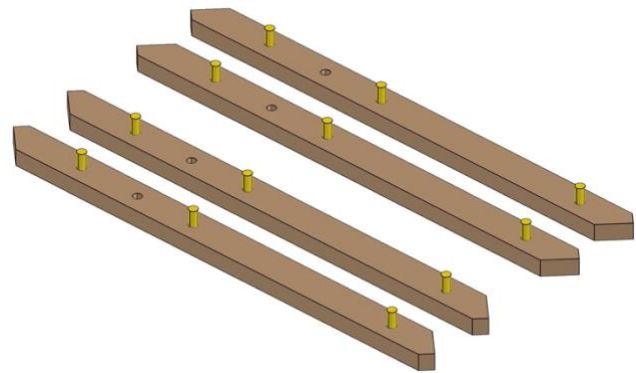


Fig. 18

- Insert three .240" Pins in each G1 piece (NOT the G2).
- Fig. 18 shows the completed process for all four G1 pieces.

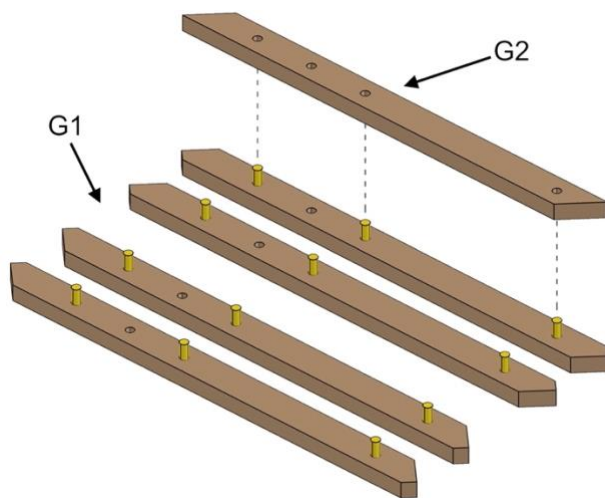


Fig. 19

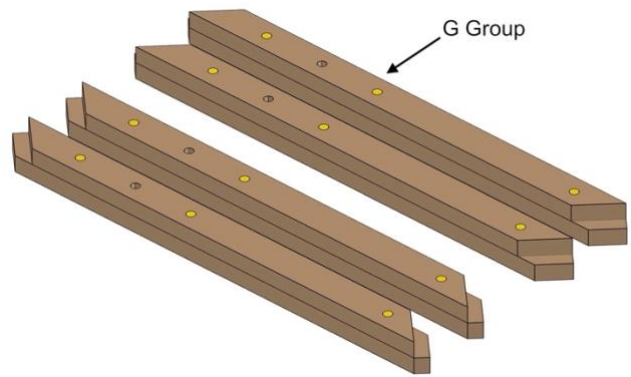


Fig. 20

- Attach the G2 pieces to the G1 pieces, as shown in Fig. 19.
- Fig. 20 shows the completed process for all the G pieces.
- Do not continue unless your parts look EXACTLY like Fig. 20.

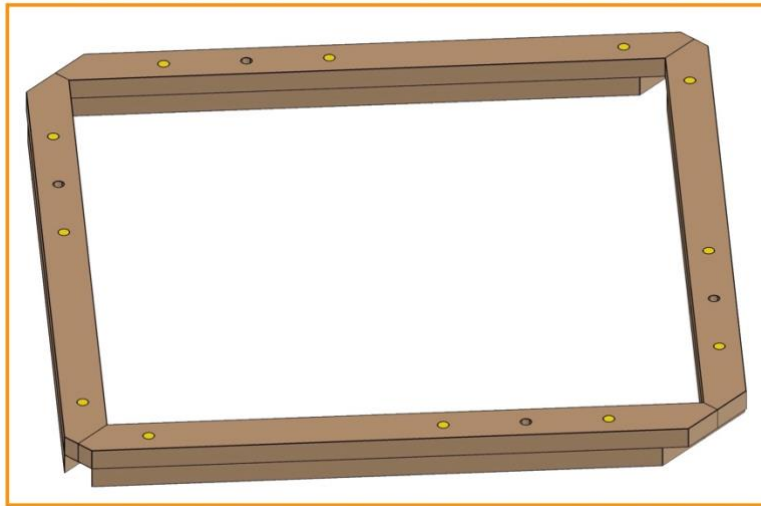


Fig. 21

- Flip the G parts over.
- Align the parts exactly as shown in *Fig. 21*.

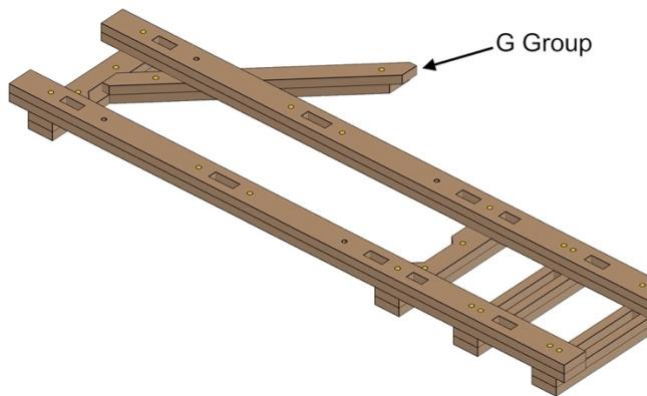


Fig. 23



Fig. 24

- Place the corresponding G part underneath the base, as shown in *Fig. 23*.
- Place the second G part underneath the base, as shown in *Fig. 24*.

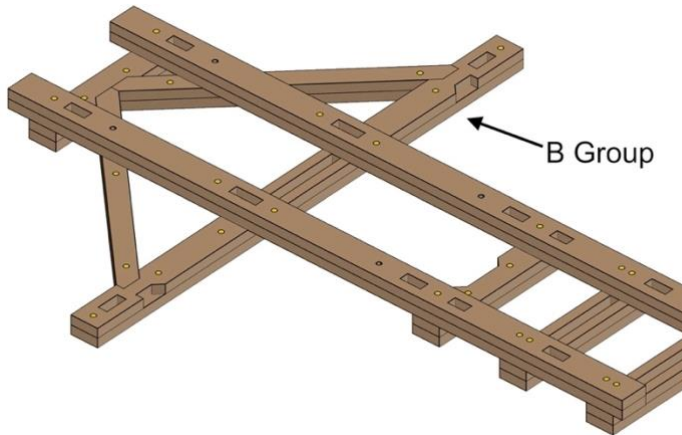


Fig. 25



Fig. 26

- Attach the B group to the Base, as shown in *Fig. 25*.
- Attach the last two G parts to the Base. The last one will have a tight fit.

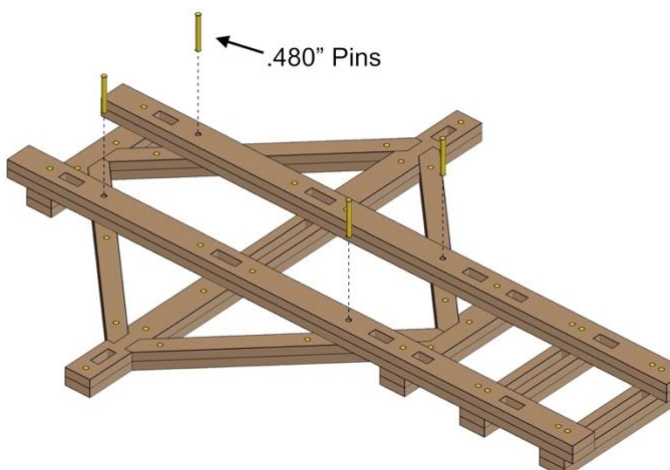


Fig. 27



Fig. 28

- Insert four .480" pins.
- *Fig. 28* shows the completed process.

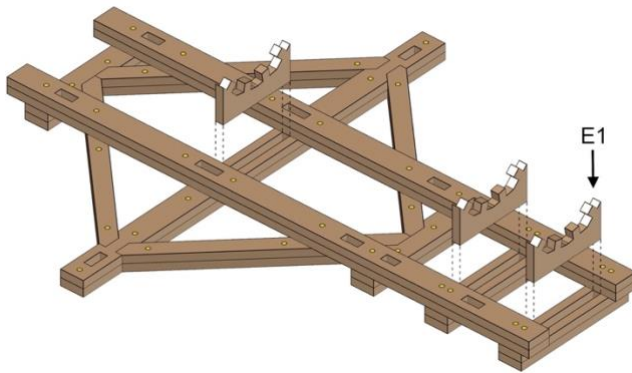


Fig. 29



Fig. 30

- Align parts exactly as shown in *Fig. 29*.
- Insert three E1 pieces to the Base.
- *Fig. 30* shows the completed process.

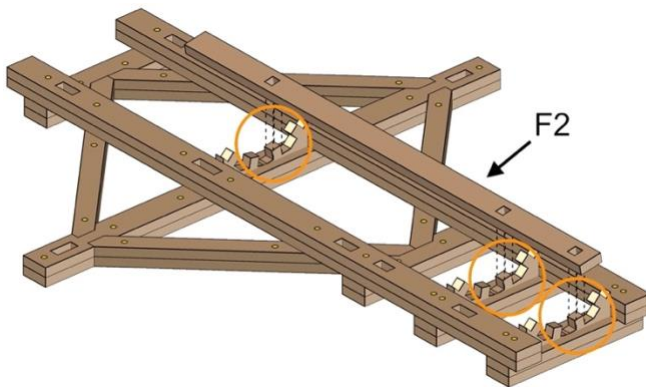


Fig. 31



Fig. 32

- Align parts exactly as shown in *Fig. 31*.
- Insert one F2 piece. The orange circle highlights the correct location.
- *Fig. 32* shows the completed process.

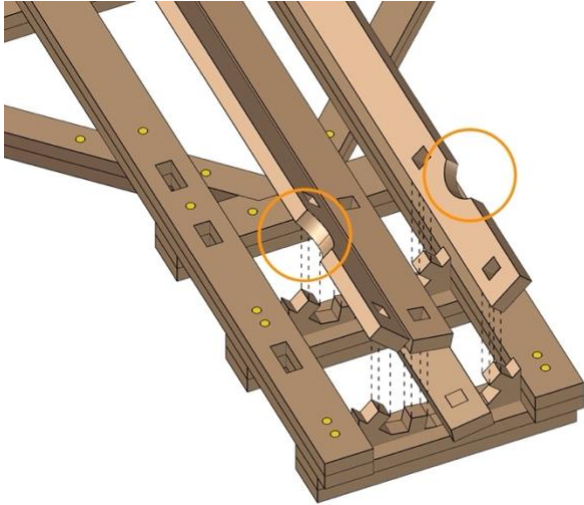


Fig. 33

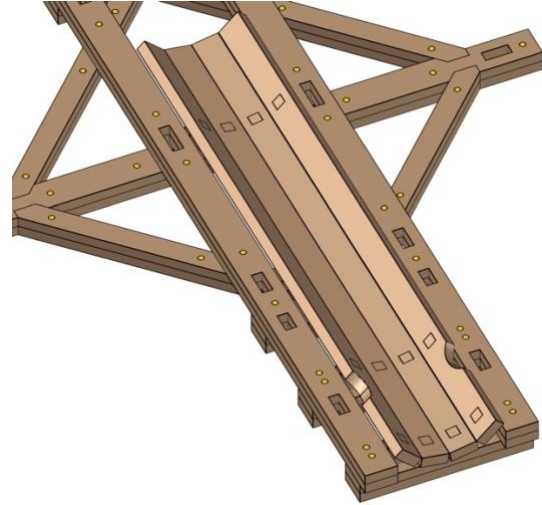


Fig. 34

- Align parts exactly as shown in *Fig. 33*.
- The orange circles highlight the correct orientation (F1 pieces are on the edge).
- Insert the rest of the F1 and F2 pieces.
- *Fig. 34* shows the completed process.

Section 2 – Supports, Braces, and Winch

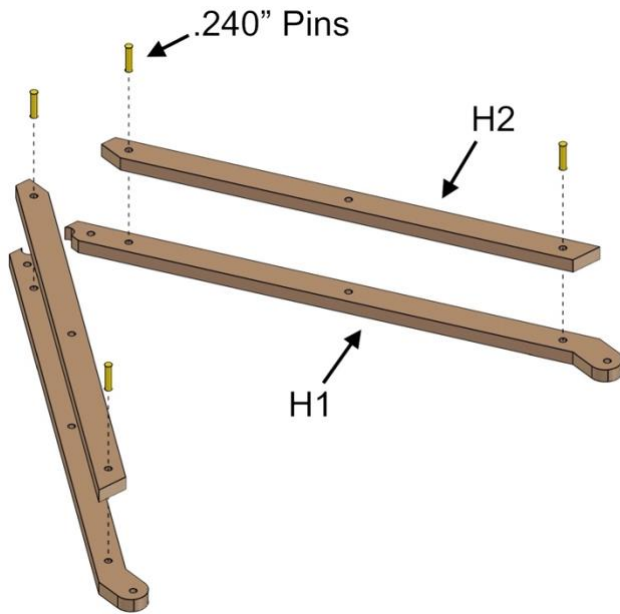


Fig. 37

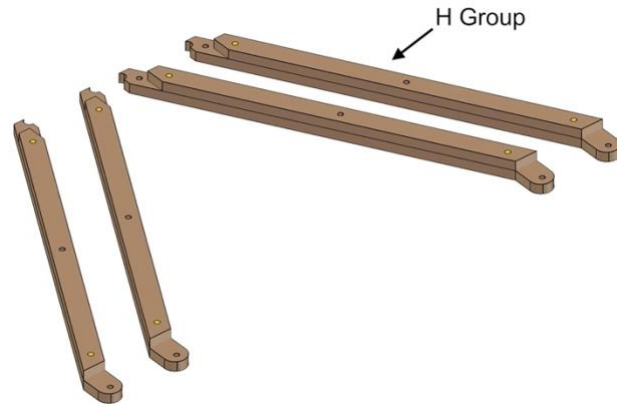


Fig. 38

- Align parts EXACTLY as shown in Fig. 37.
- Insert two .240" pins for each H1 piece.
- Fig. 38 shows the completed process (make four parts).

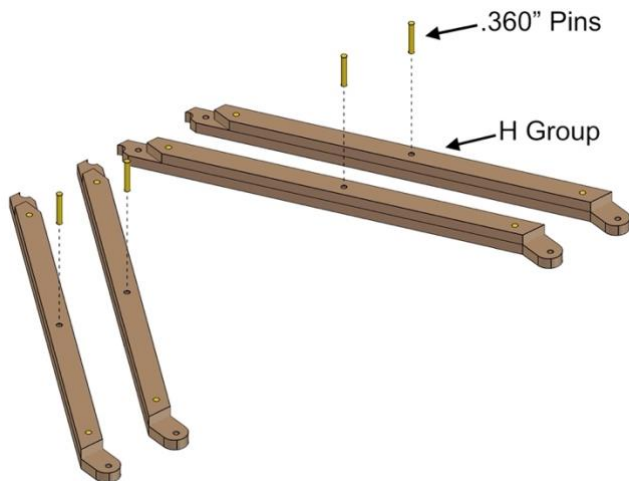


Fig. 39

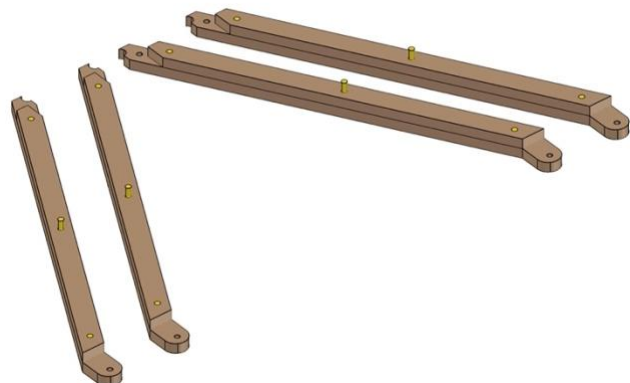


Fig. 40

- Insert four .360" pins, as shown in Fig. 39.
- Fig. 40 shows the completed process.

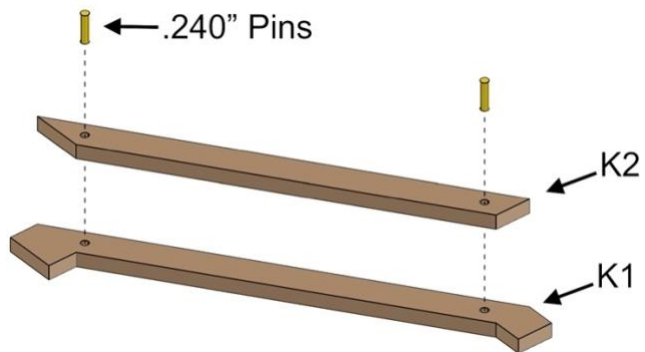


Fig. 41

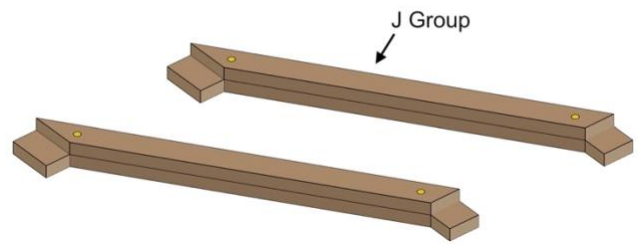


Fig. 42

- Align parts exactly as shown in Fig. 41.
- Insert two .240" pins.
- Fig. 42 shows the completed process (make two parts).

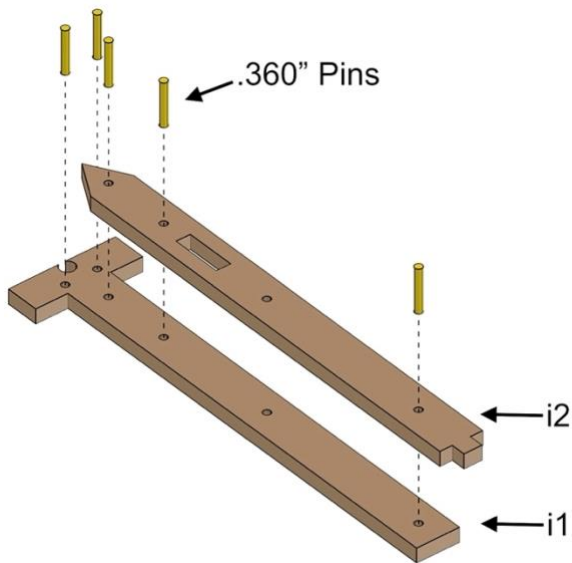


Fig. 43

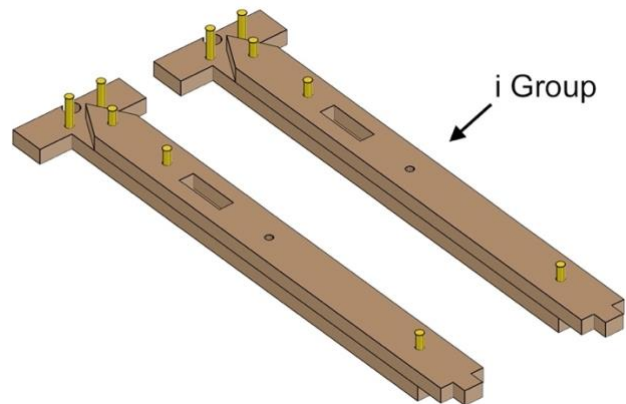


Fig. 44

- Align parts exactly as shown in Fig. 43.
- Insert five .360" pins.
- Fig. 44 shows the completed process (make two parts).

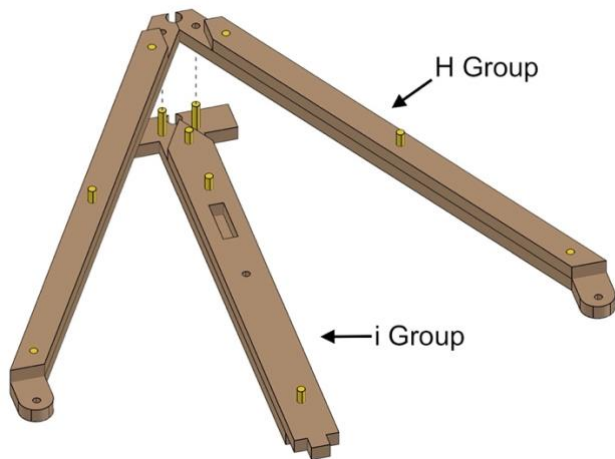


Fig. 45



Fig. 46

- Align parts exactly as shown in *Fig. 45*.
- Attach the H Group to the i Group.
- *Fig. 46* shows the completed process (make two parts).

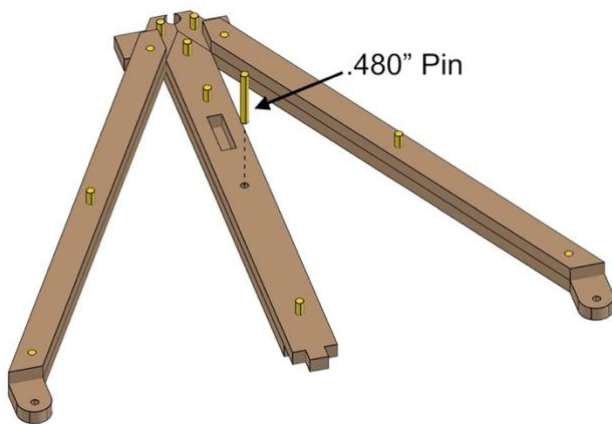


Fig. 47



Fig. 48

- Align parts exactly as shown in *Fig. 47*.
- Insert one .480" pin.
- *Fig. 48* shows the completed process (make two parts).

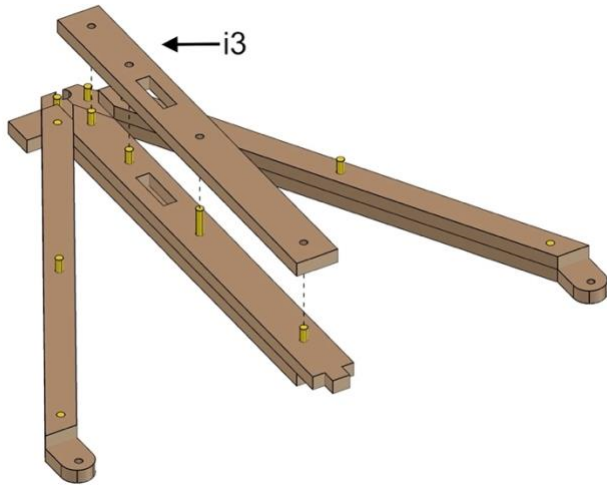


Fig. 49



Fig. 50

- Align parts exactly as shown in *Fig. 49*.
- Attach the i3 piece.
- *Fig. 50* shows the completed process (make two parts).

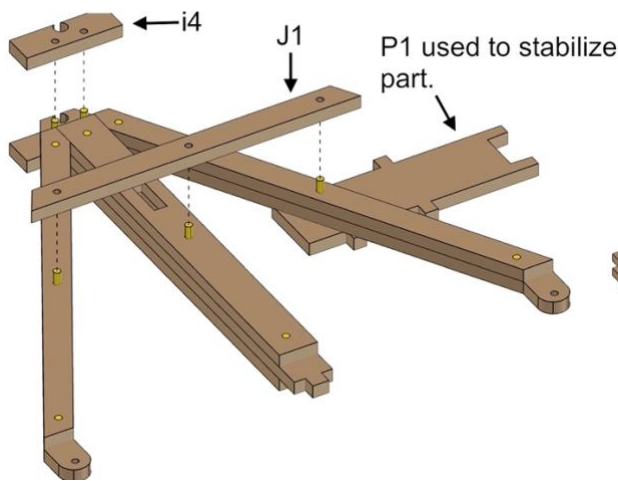


Fig. 51

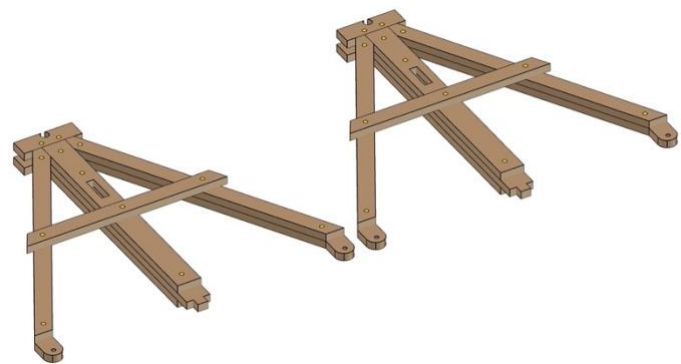


Fig. 52

- Align parts exactly as shown in *Fig. 51*.
- Insert the i4 piece.
- Use a spare piece of wood (P1 piece) to support the underside of the part.
- Insert the J1 piece.
- *Fig. 52* shows the completed process (make two parts).

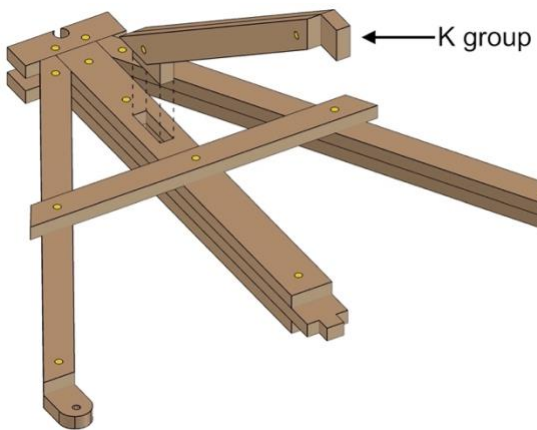


Fig. 52.1

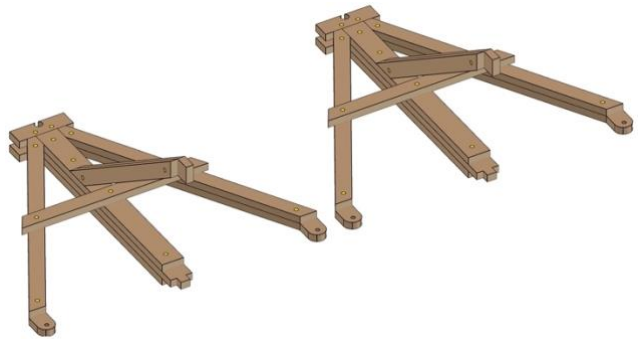


Fig. 52.2

- Align parts exactly as shown in *Fig. 52.1*.
- Insert the K group.
- *Fig. 52.2* shows the completed process (make two parts).

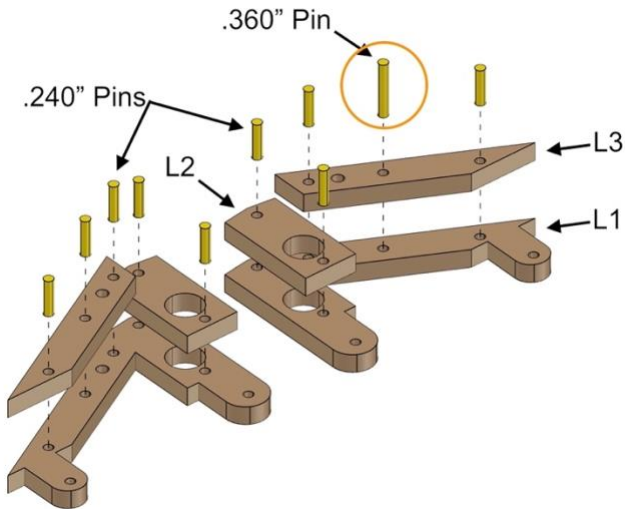


Fig. 53

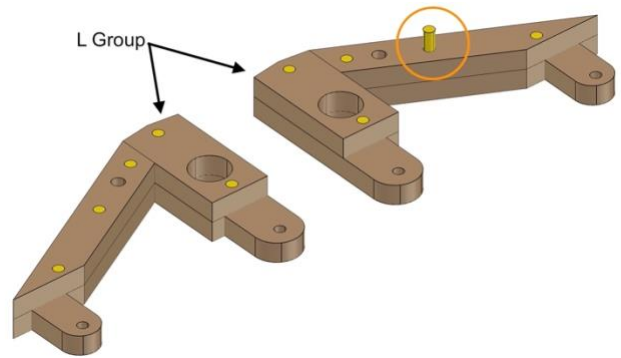


Fig. 54

- Align parts exactly as shown in Fig. 53.
- Insert nine .240" pins.
- Insert the one .360" pin to the right L1 piece.
- Attach the L2 and L3 pieces.
- Fig. 54 shows the completed process.

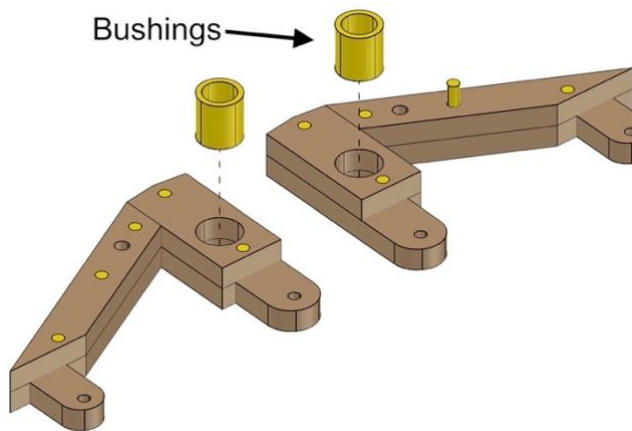


Fig. 55

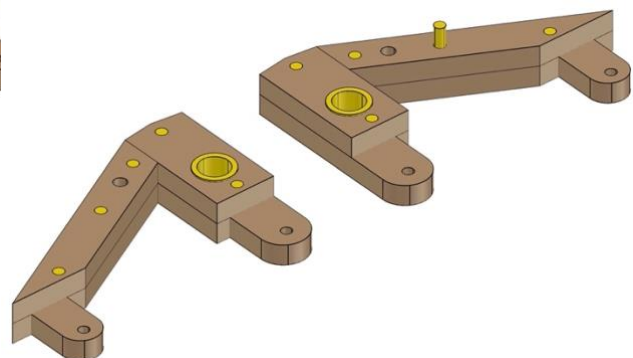


Fig. 56

- Insert two Bushings onto the parts.
- If the bushings are loose, they may fall out. Use a small amount of superglue if needed.
- Fig. 56 shows the completed process.

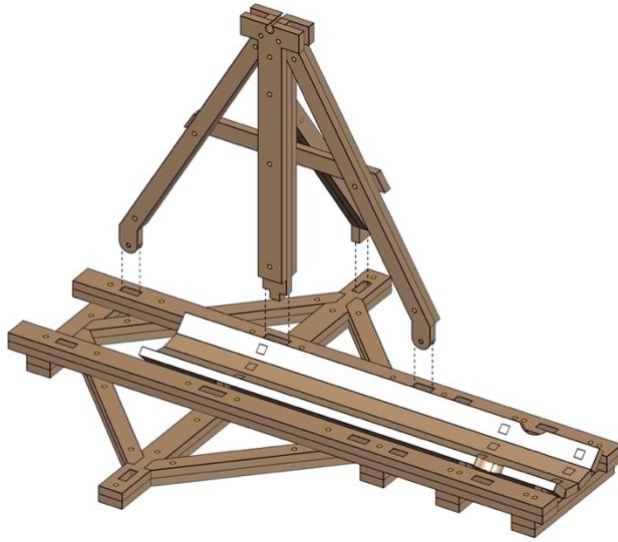


Fig. 57



Fig. 58

- Align parts exactly as shown in *Fig. 57*.
- Attach the Support/Brace structure to the Base.
- Light taps with a hammer are recommended.
- *Fig. 58* shows the completed process.

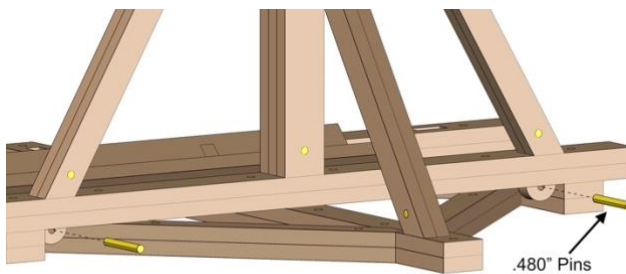


Fig. 59

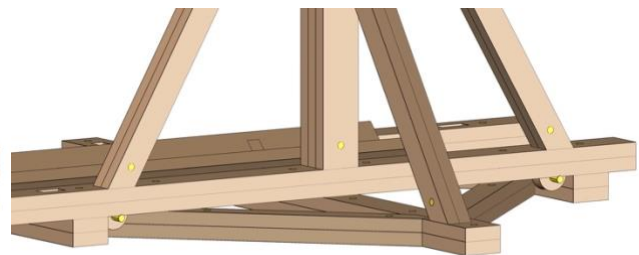


Fig. 60

- Insert two .480" pins to secure the Support/Brace structure.
- Push them in with a hammer or wood piece.
- *Fig. 60* shows the completed process.

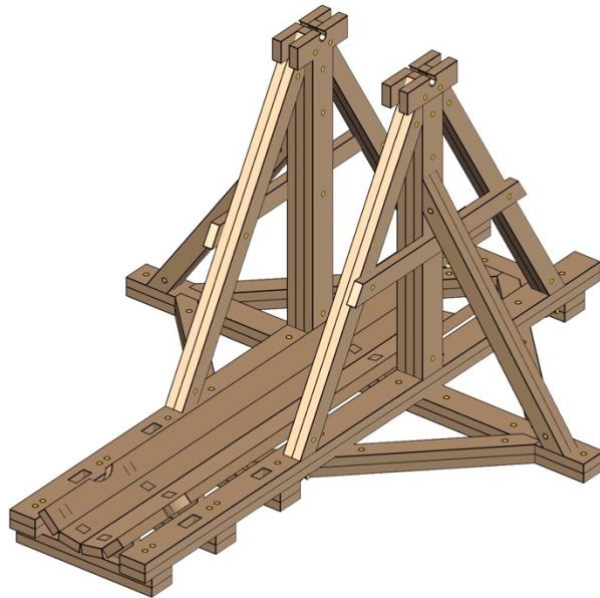


Fig. 57

- Repeat the previous steps for the other Support/Brace structure.
- Fig. 57 shows the completed process.

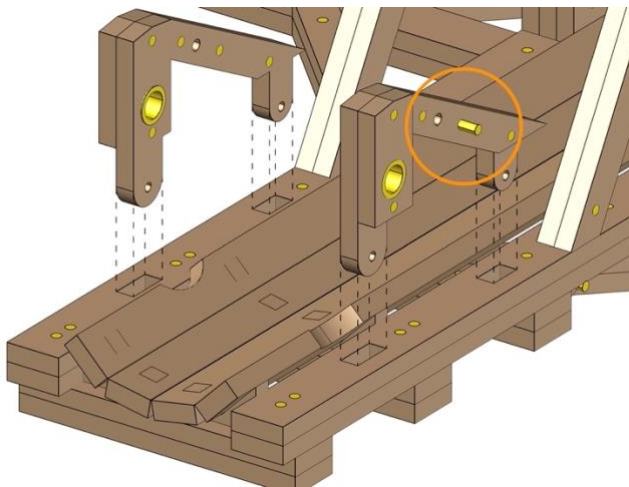


Fig. 59

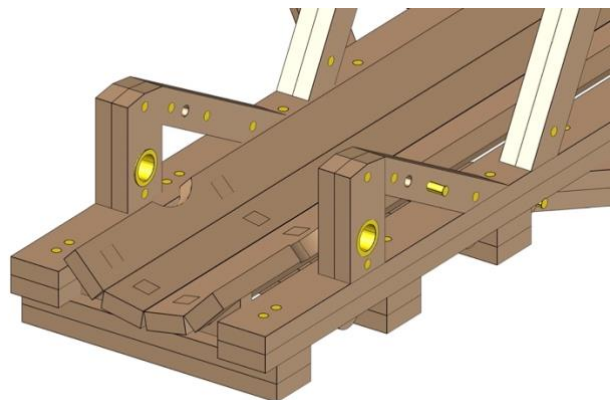


Fig. 60

- Align parts exactly as shown in Fig. 59.
- Insert the L Group to the Base.
- Fig. 60 shows the completed process.

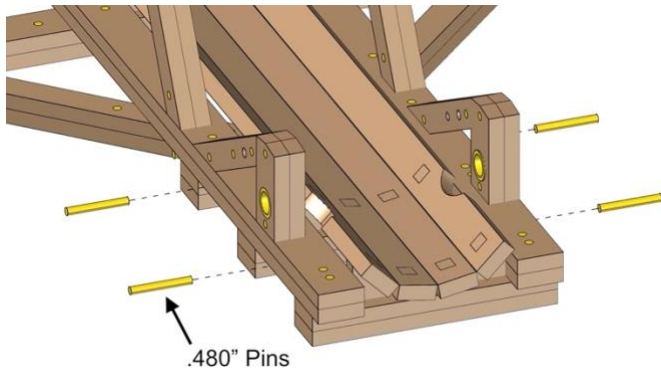


Fig. 57

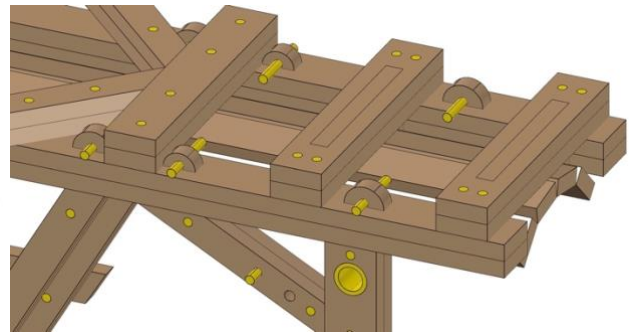


Fig. 58

- Insert four .480" pins to secure the L Group to the Base.
- Fig. 58 shows the completed process.

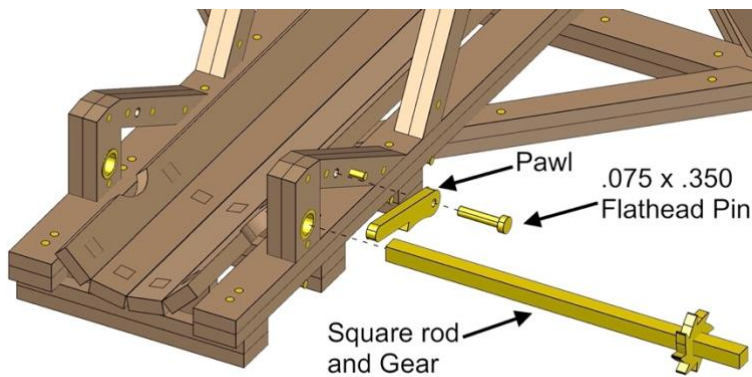


Fig. 59

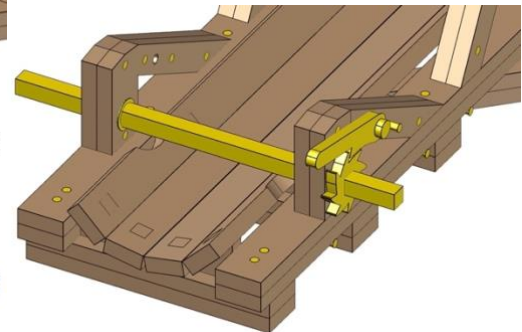


Fig. 60

- Align parts exactly as shown in Fig. 59.
- Insert the Square rod and Gear. The Square rod should easily rotate.
- Insert the .075 x .350 Pin and the Pawl into the Winch (L group). The Pawl should easily rotate.
- Fig. 60 shows the completed process.

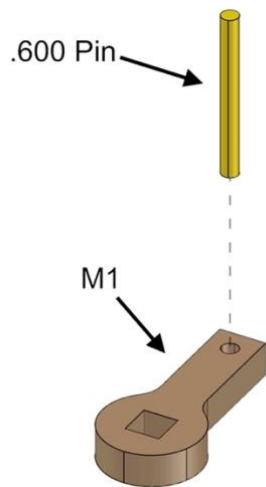


Fig. 57

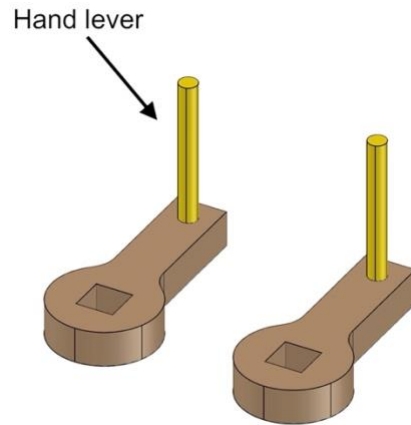


Fig. 58

- Align parts exactly as shown in Fig. 57.
- Insert one .600" pin.
- Fig. 58 shows the completed process (make two parts).

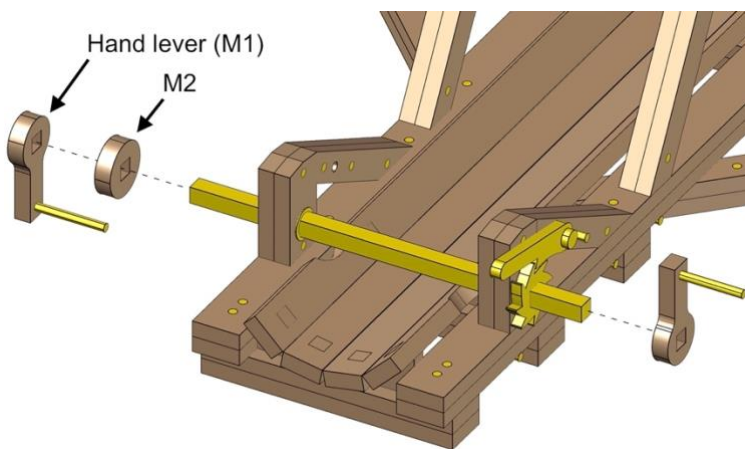


Fig. 59

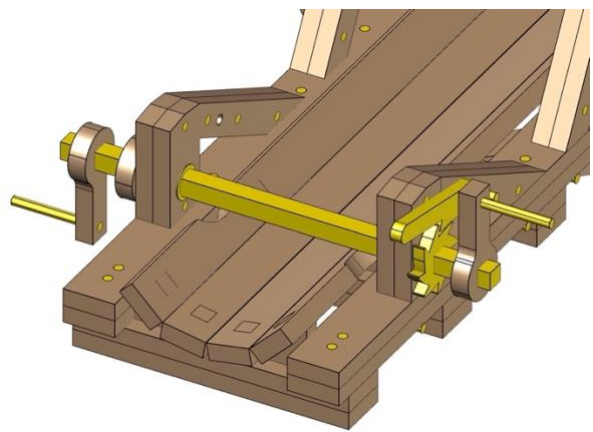


Fig. 60

- Align parts exactly as shown in Fig. 59.
- Insert the M2 piece onto the Square rod.
- Adjust the M2 so there is just enough room for the Square rod/Gear to rotate.
- If the M2 is loose, use a small amount of superglue to secure it in place.
- Insert the Hand levers.
- Fig. 60 shows the completed process.

Section 3 – Arm and Counterweight

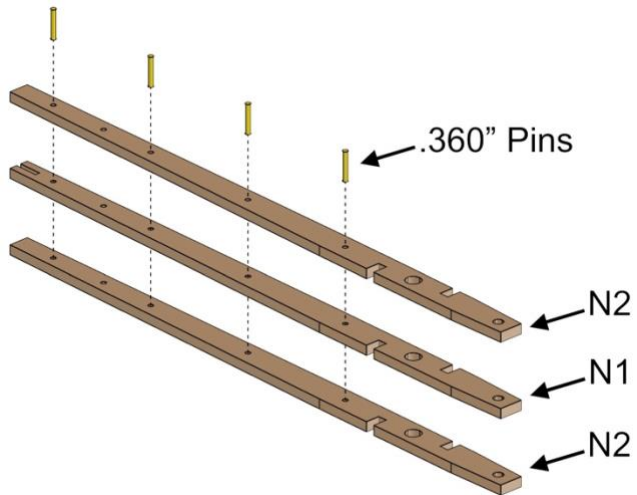


Fig. 61

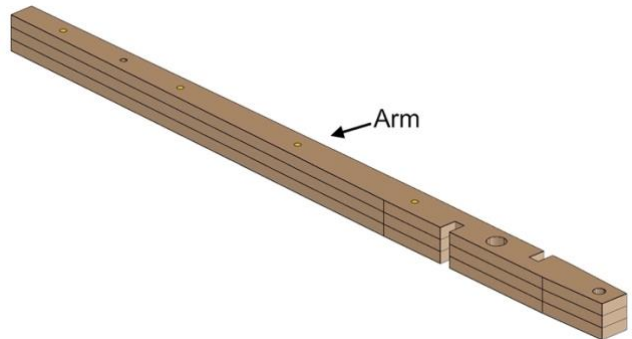


Fig. 62

- Align parts exactly as shown in Fig. 61.
- Insert four .360" pins.
- Fig. 62 shows the completed process.

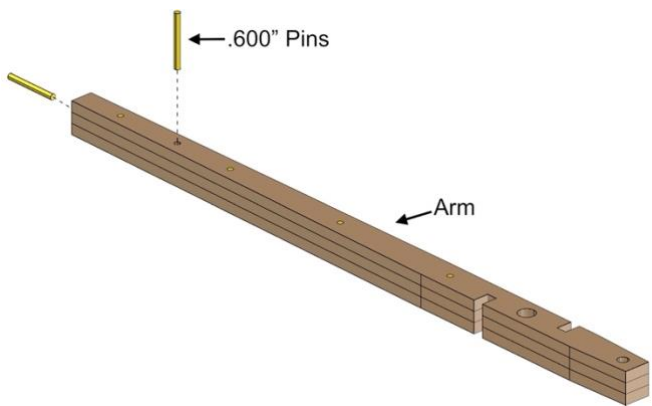


Fig. 63

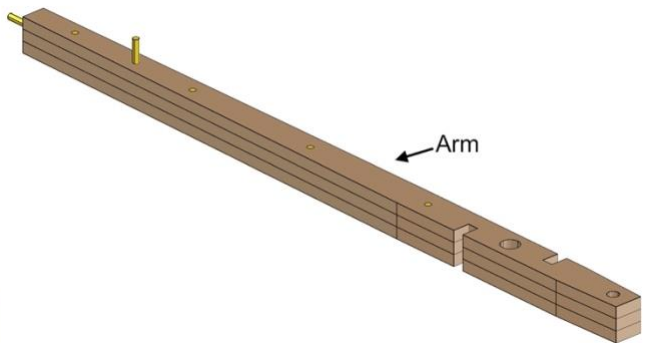


Fig. 64

- Insert two .600" pins.
- Fig. 64 shows the completed process.

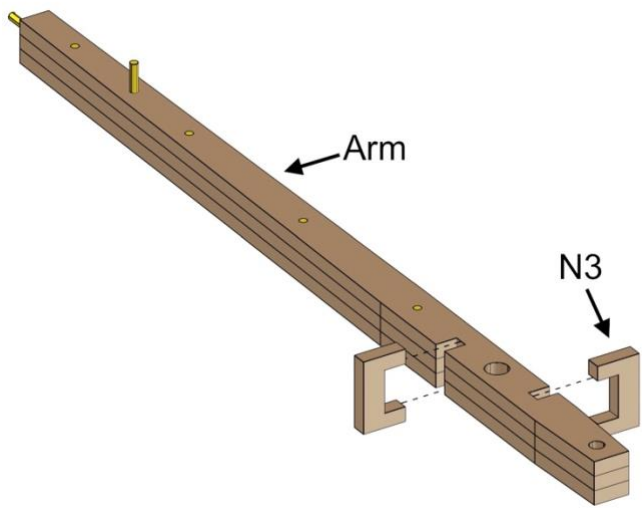


Fig. 65

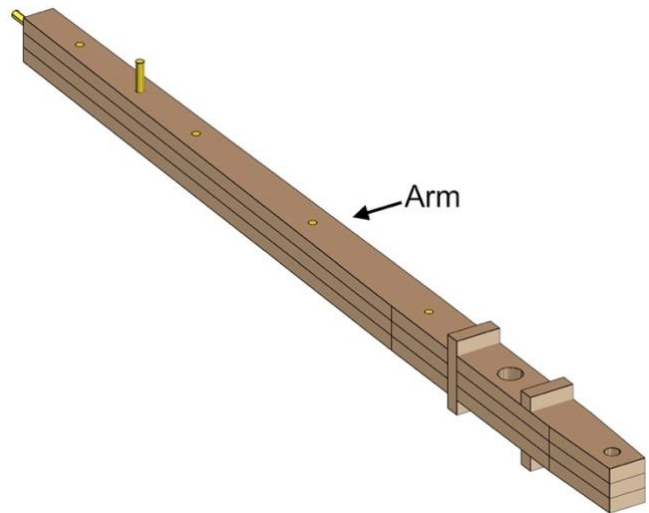


Fig. 66

- Align parts exactly as shown in *Fig. 65*.
- Insert two N3 pieces.
- *Fig. 66* shows the completed process.

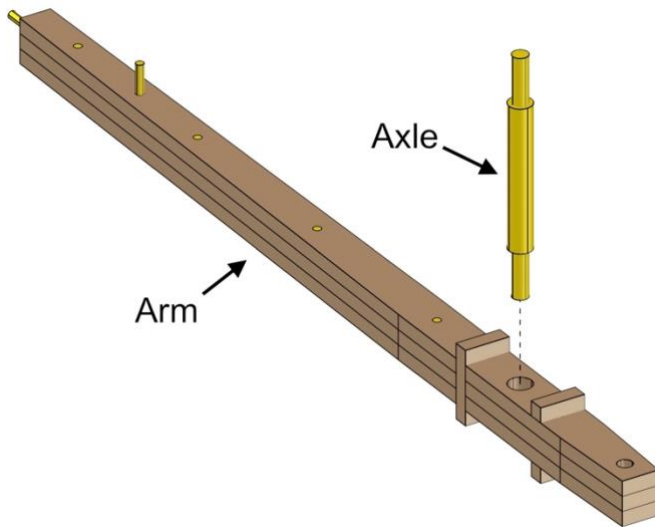


Fig. 67

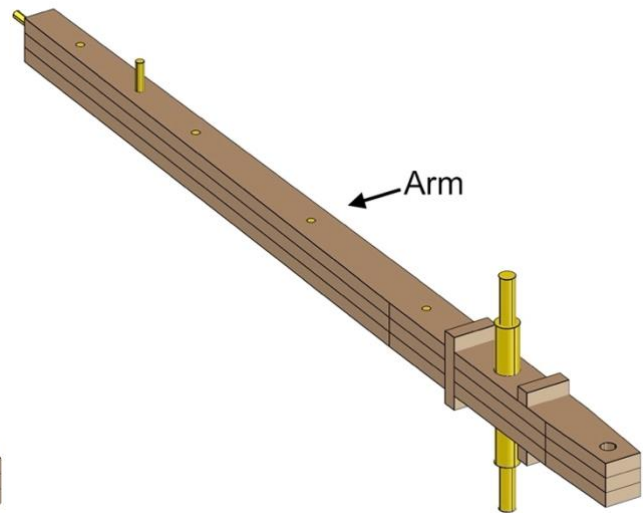


Fig. 68

- Align parts exactly as shown in *Fig. 67*.
- Insert the Axle.
- *Fig. 68* shows the completed process.

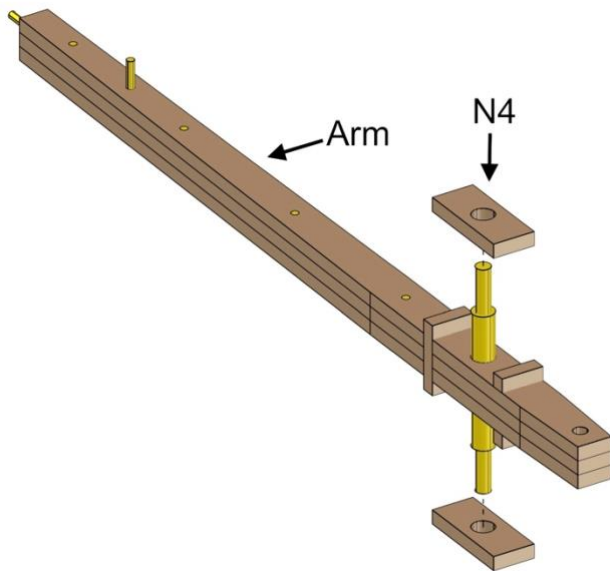


Fig. 69

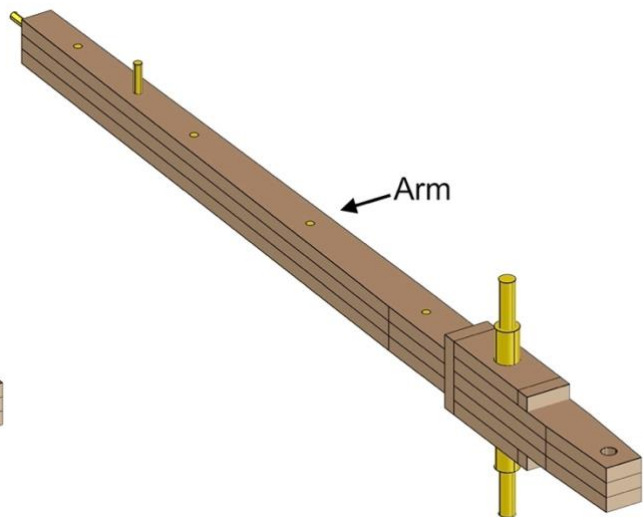


Fig. 70

- Align parts exactly as shown in Fig. 69.
- Insert two N4 pieces.
- Fig. 70 shows the completed process.

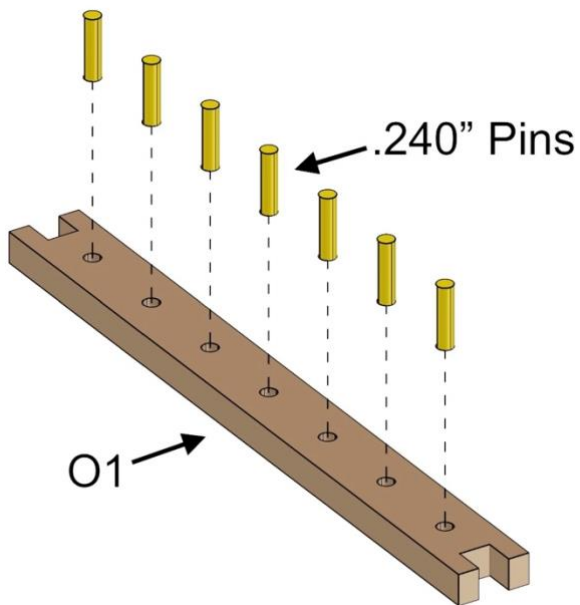


Fig. 71

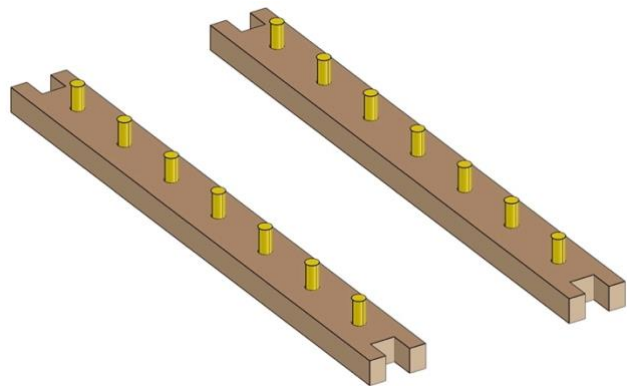


Fig. 72

- Align parts exactly as shown in Fig. 71.
- Insert seven .240" pins.
- Fig. 72 shows the completed process (make two parts).

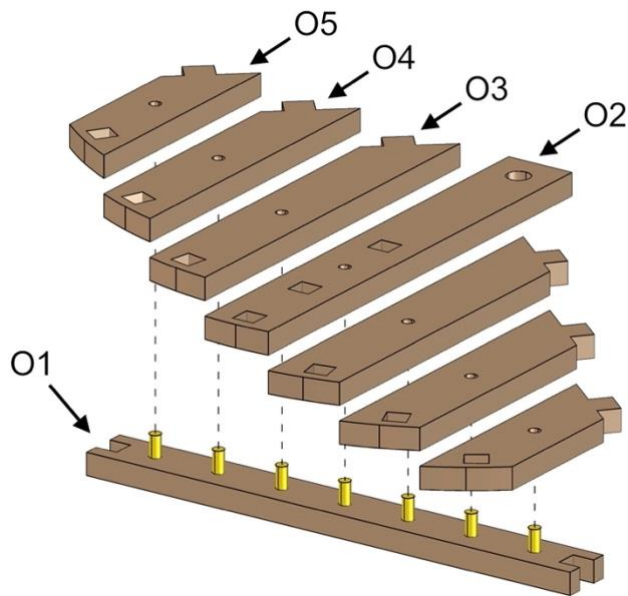


Fig. 73

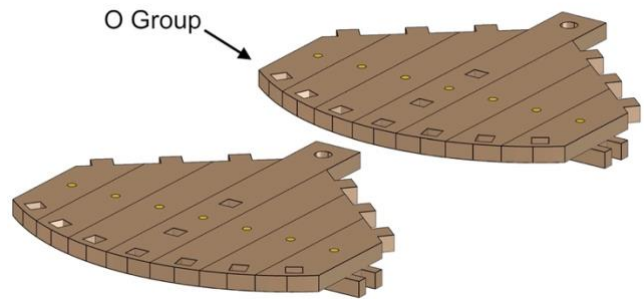


Fig. 74

- Align parts exactly as shown in Fig. 73.
- Insert the O2, O3, O4, and O5 pieces.
- Fig. 74 shows the completed process (make two parts).

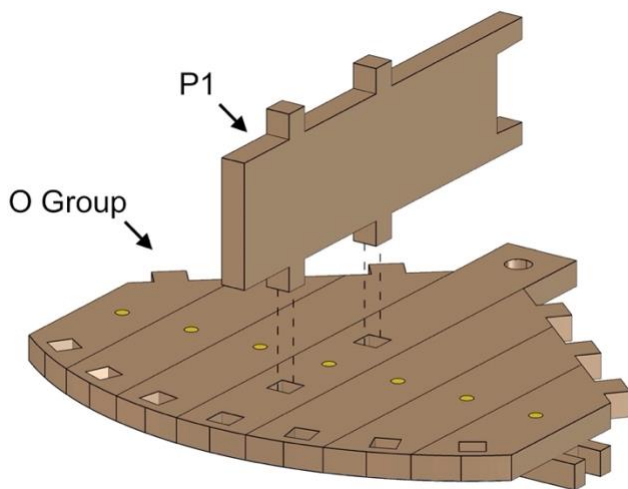


Fig. 75

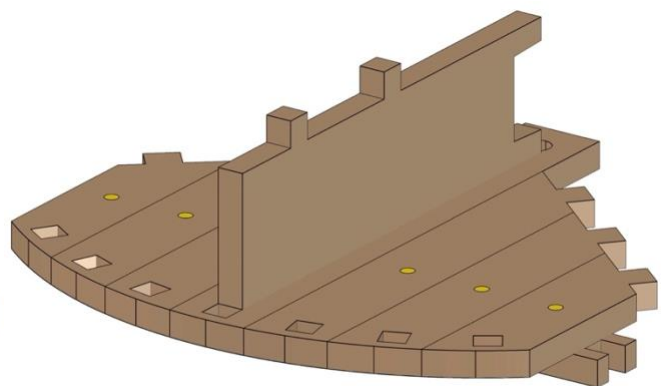


Fig. 76

- Align parts exactly as shown in Fig. 75.
- Insert P1.
- Fig. 76 shows the completed process.

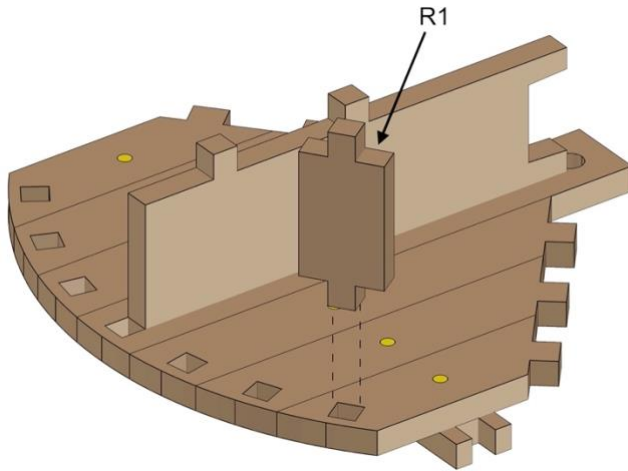


Fig. 77

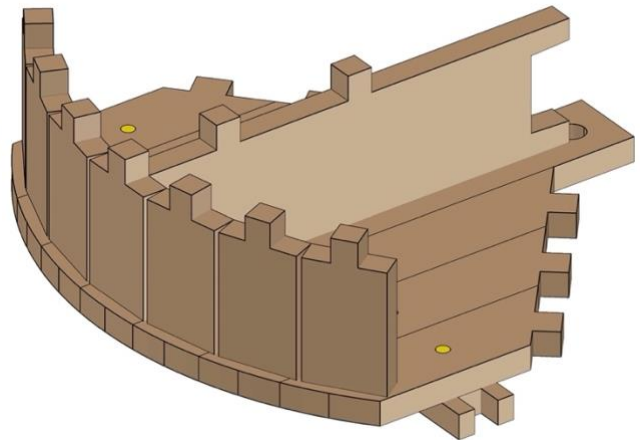


Fig. 78

- Align parts exactly as shown in *Fig. 77*.
- Insert seven R1 pieces. (only one is shown in *Fig. 77*)
- *Fig. 78* shows the completed process.

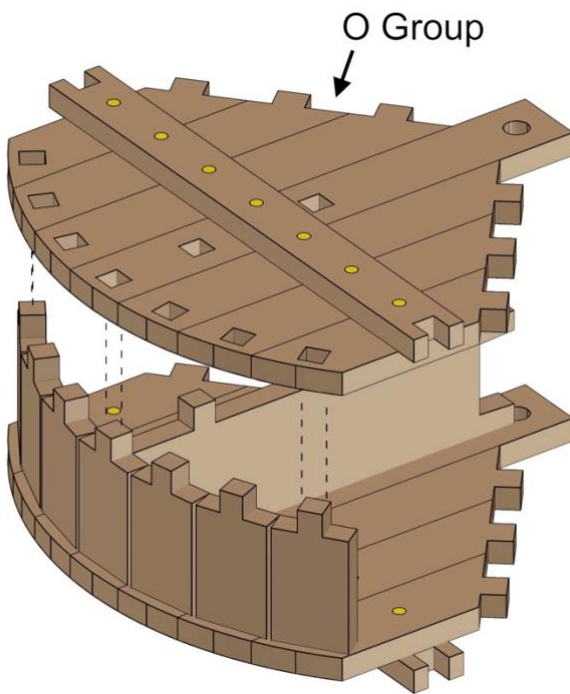


Fig. 79

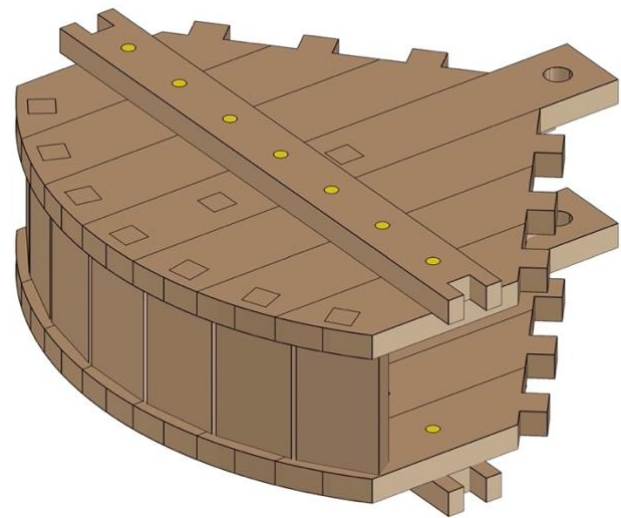


Fig. 80

- Align parts exactly as shown in *Fig. 79*.
- Insert the O Group to the Counterweight.
- *Fig. 80* shows the completed process.

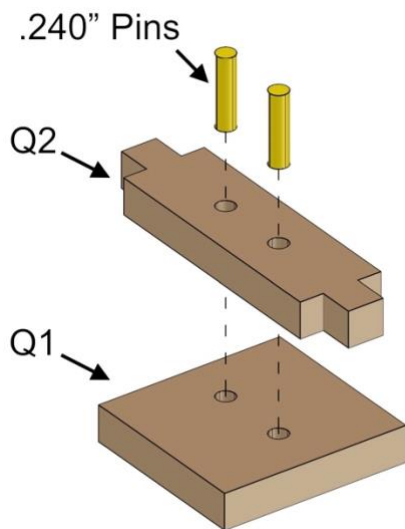


Fig. 81

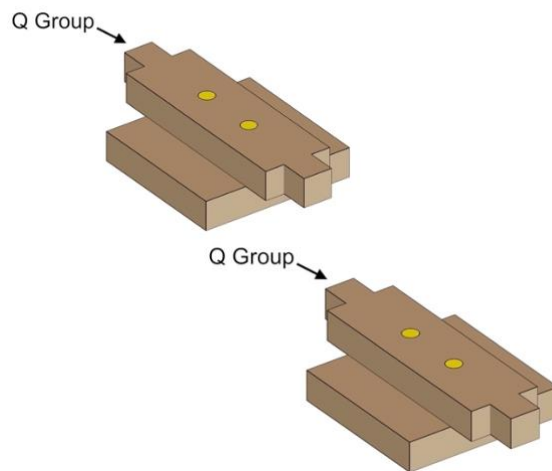


Fig. 82

- Align parts exactly as shown in Fig. 81.
- Insert two .240" pins.
- Fig. 82 shows the completed process (make two parts).

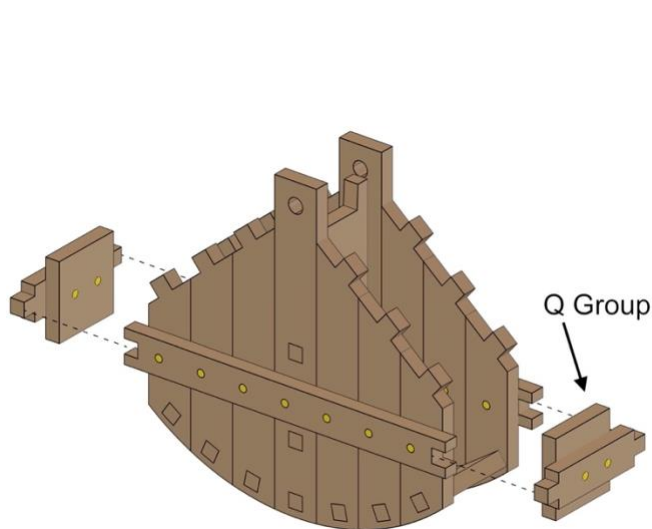


Fig. 83

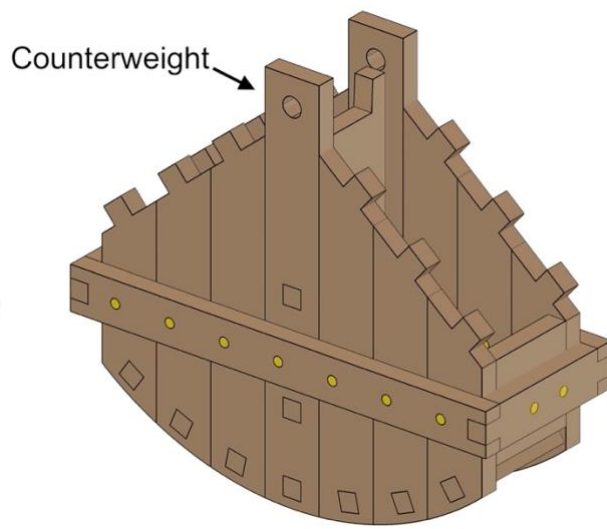


Fig. 84

- Align parts exactly as shown in Fig. 83.
- Insert two Q Groups.
- Fig. 84 shows the completed process.

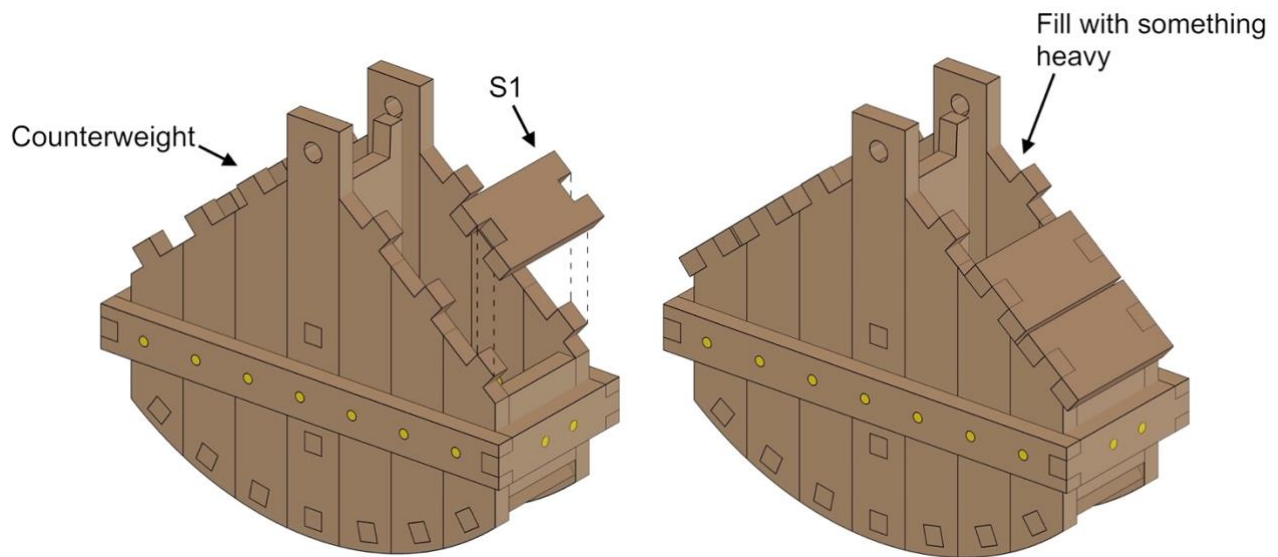


Fig. 85

Fig. 86

- Align parts exactly as shown in *Fig. 85*.
- Insert four S1 pieces.
- *Fig. 86* shows the completed process.
- Fill the Counterweight with something heavy before proceeding (steel BBs or lead shot is recommended).

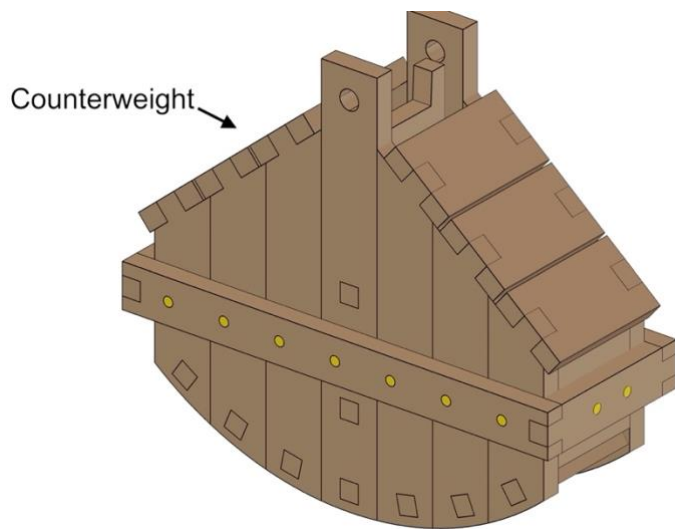


Fig. 87

- Insert the last two S1 pieces.
- *Fig. 87* shows the completed process.

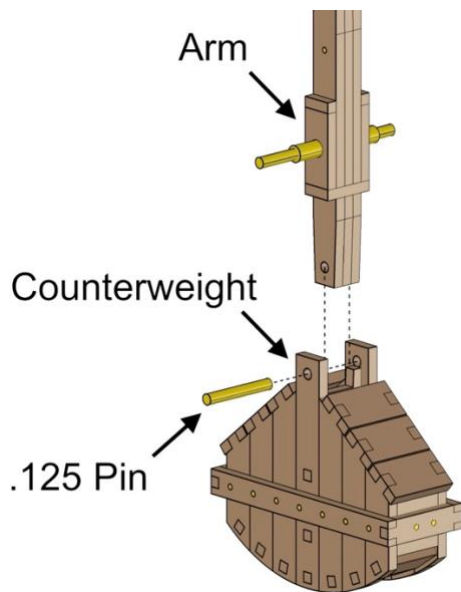


Fig. 88

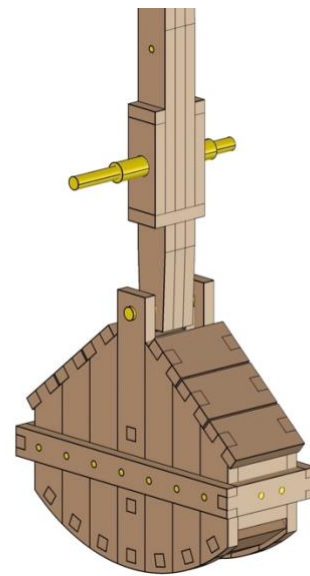


Fig. 89

- Align parts exactly as shown in *Fig. 88*.
- Insert one .125 pin to secure the Arm to the Counterweight.
- *Fig. 89* shows the completed process.

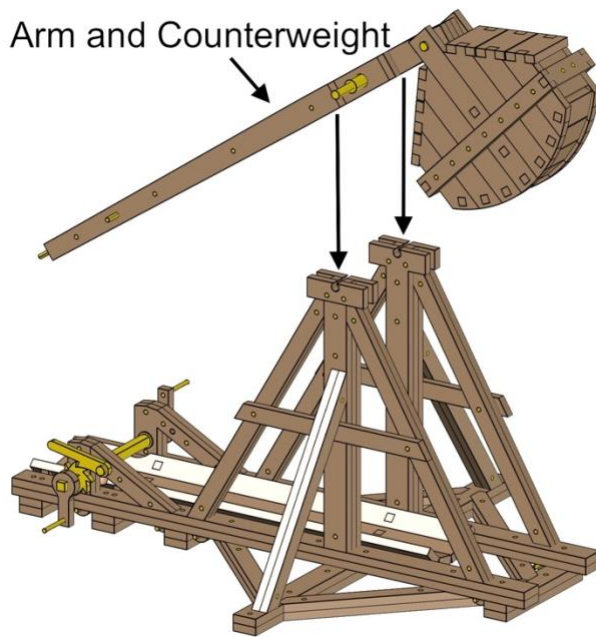


Fig. 90

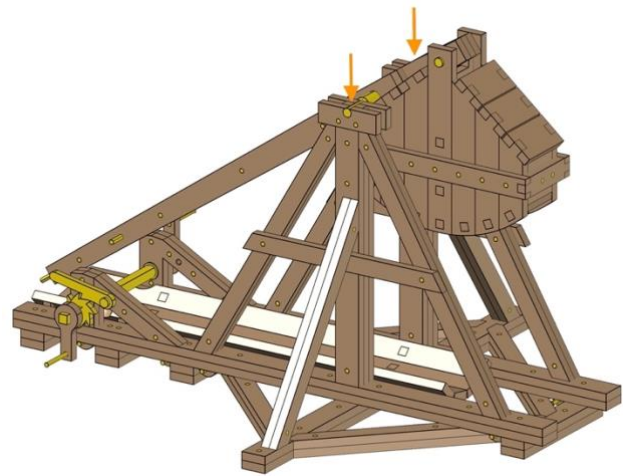
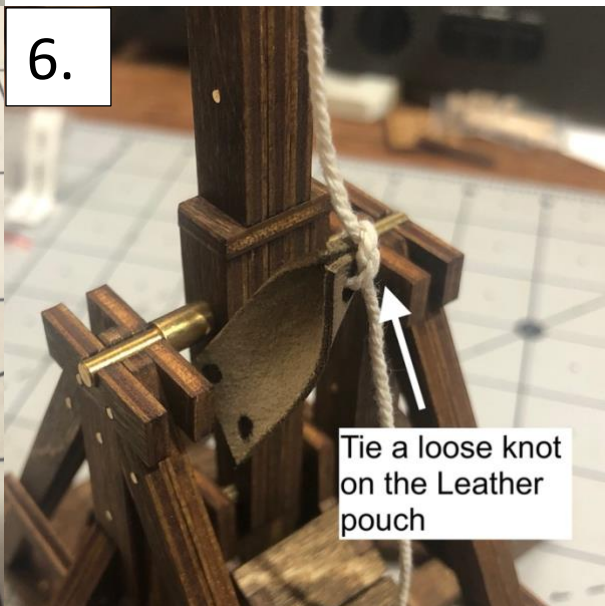
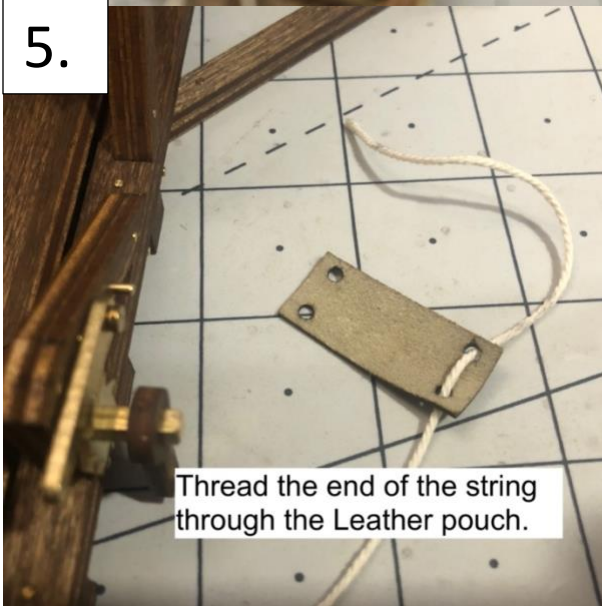
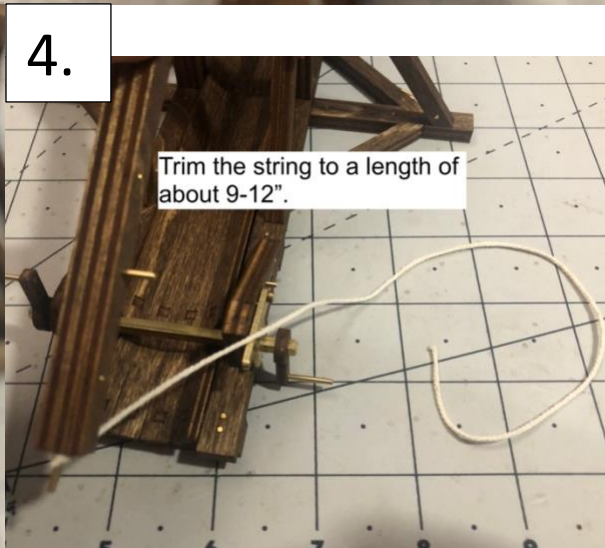
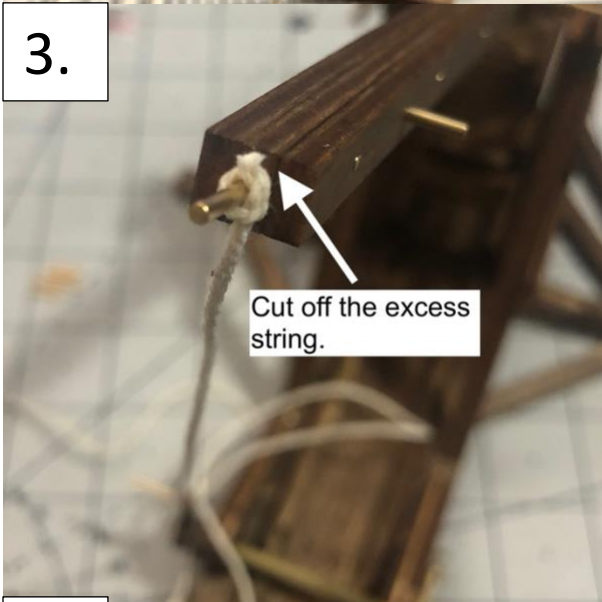
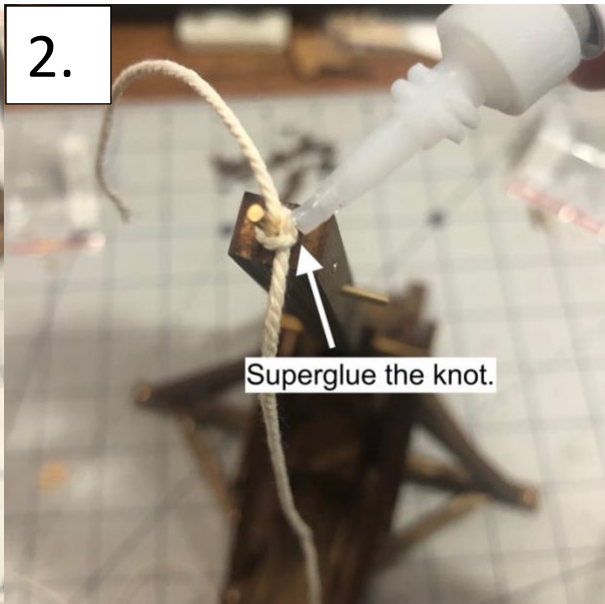
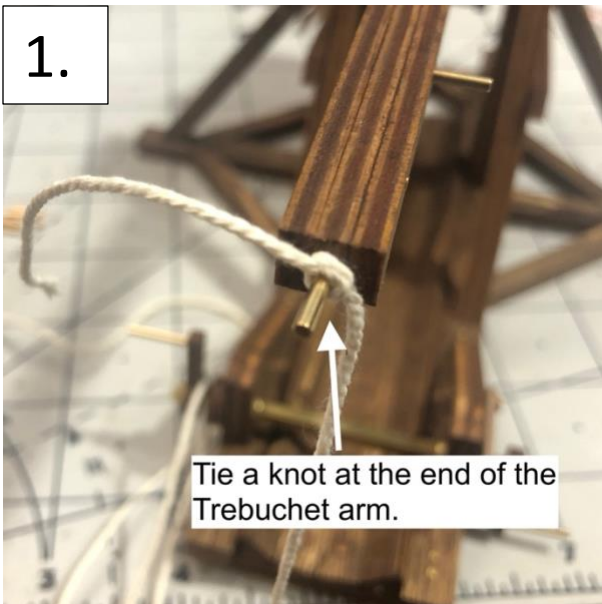
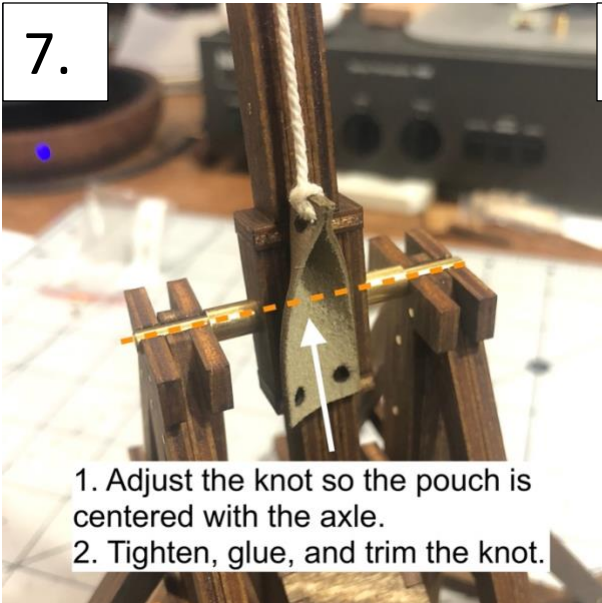


Fig. 91

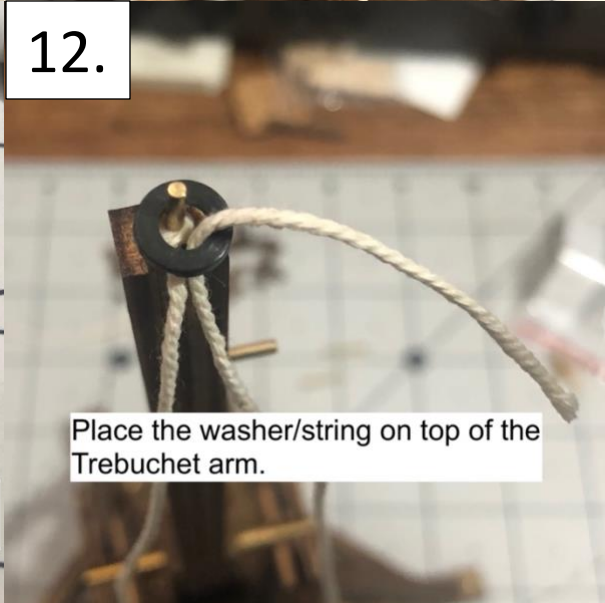
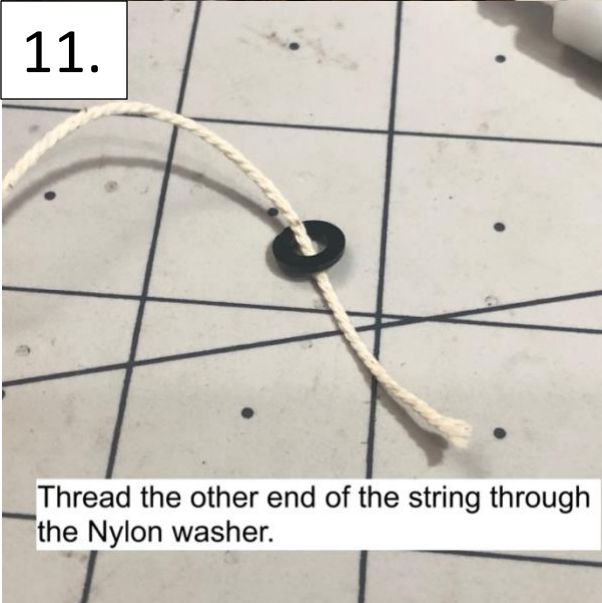
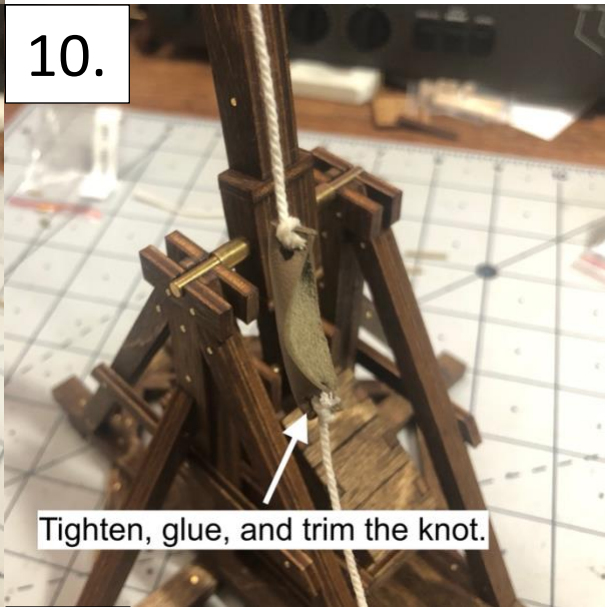
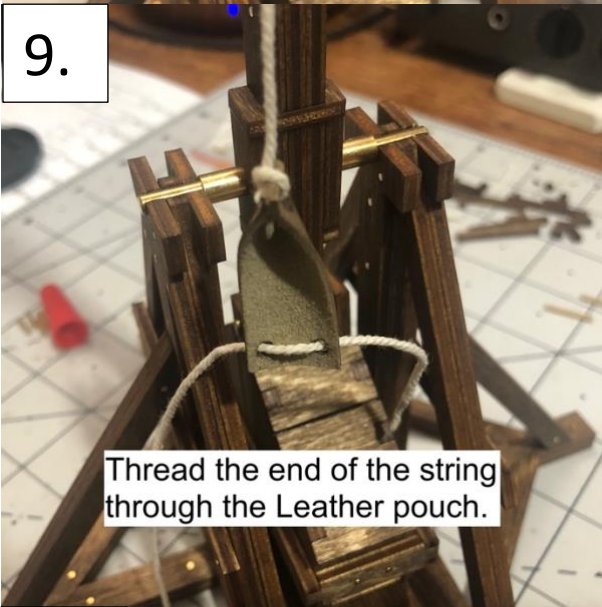
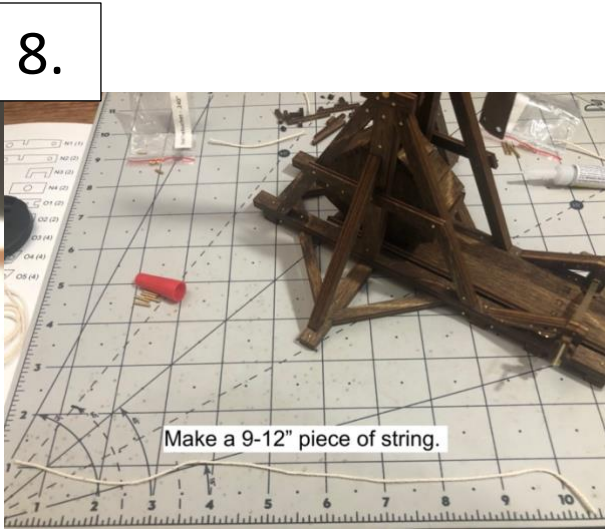
- Align parts exactly as shown in *Fig. 90*.
- Insert the Arm and Counterweight to the Trebuchet frame.
- If needed, lightly tap into place with a hammer.
- *Fig. 91* shows the completed process.

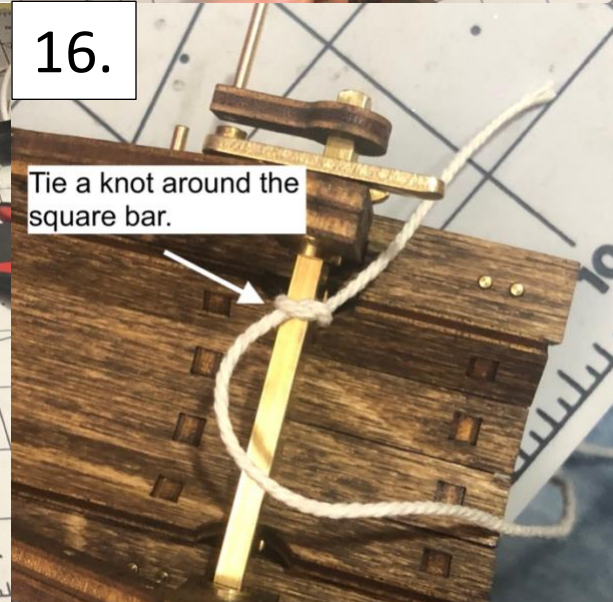
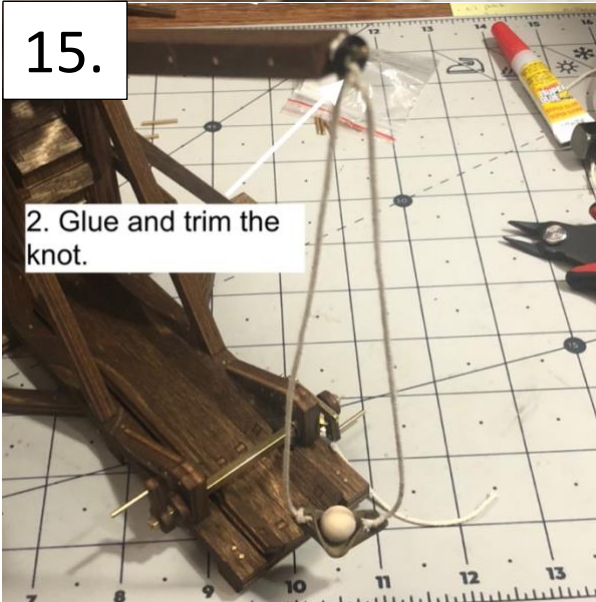
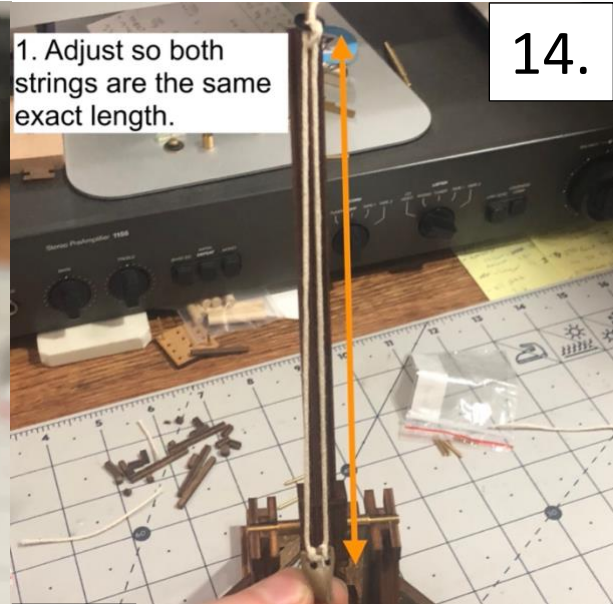
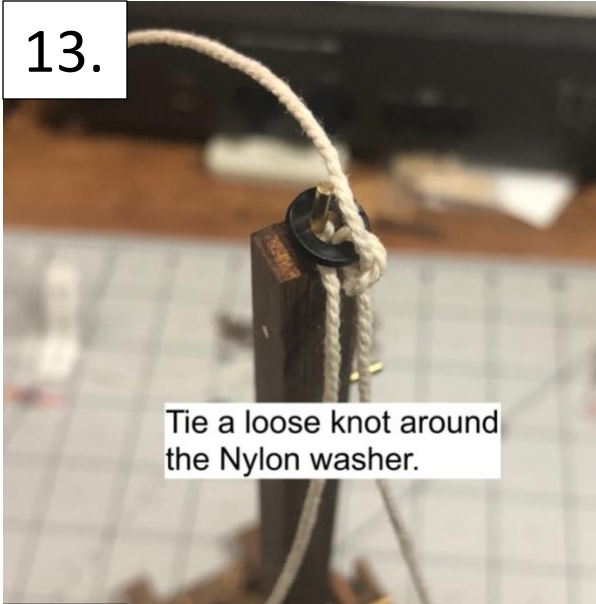
Section 4 – String



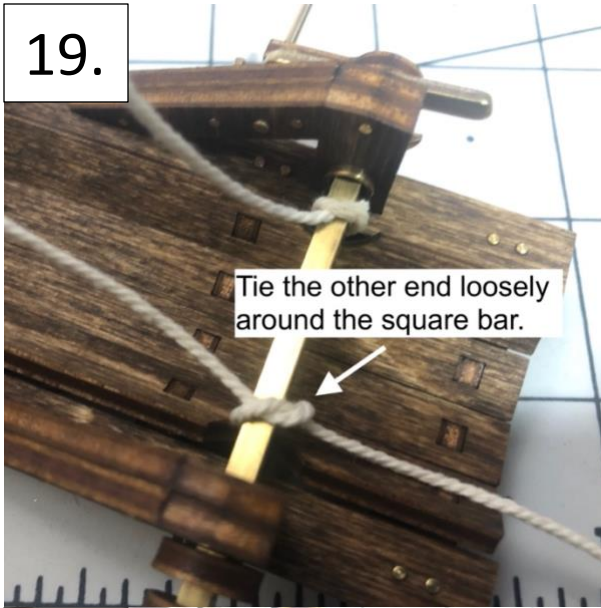


1. Adjust the knot so the pouch is centered with the axle.
2. Tighten, glue, and trim the knot.



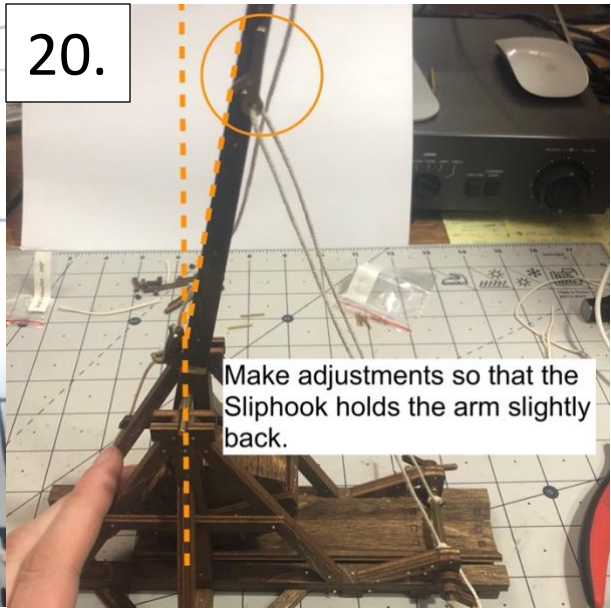


19.



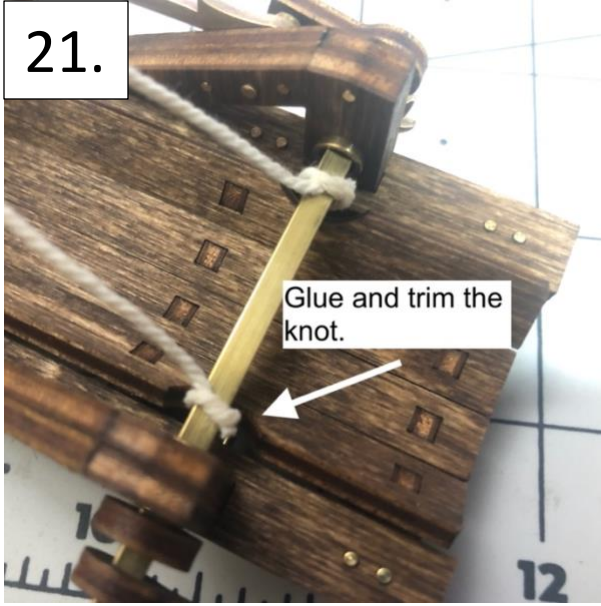
Tie the other end loosely around the square bar.

20.



Make adjustments so that the Sliphook holds the arm slightly back.

21.



Glue and trim the knot.

Section 5 – Operation

