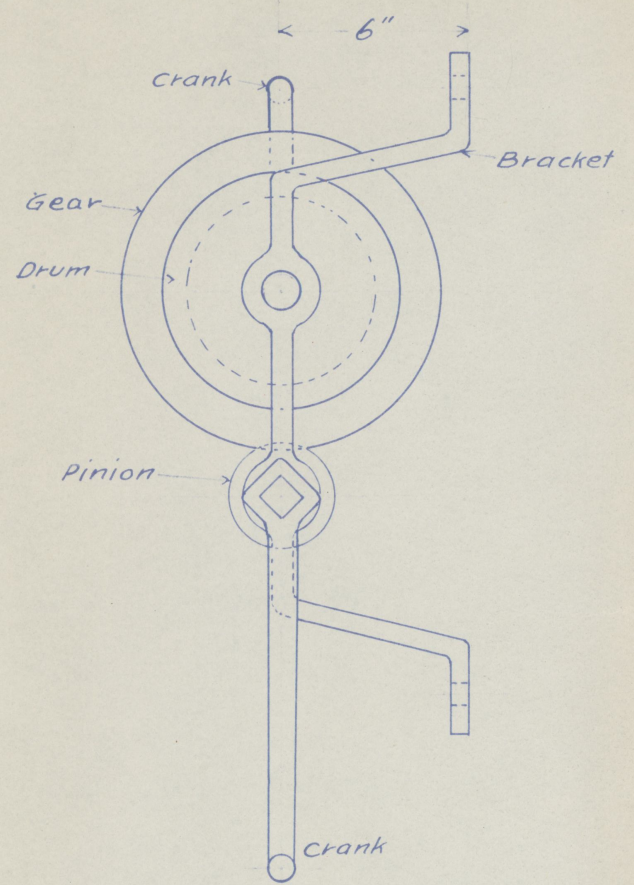
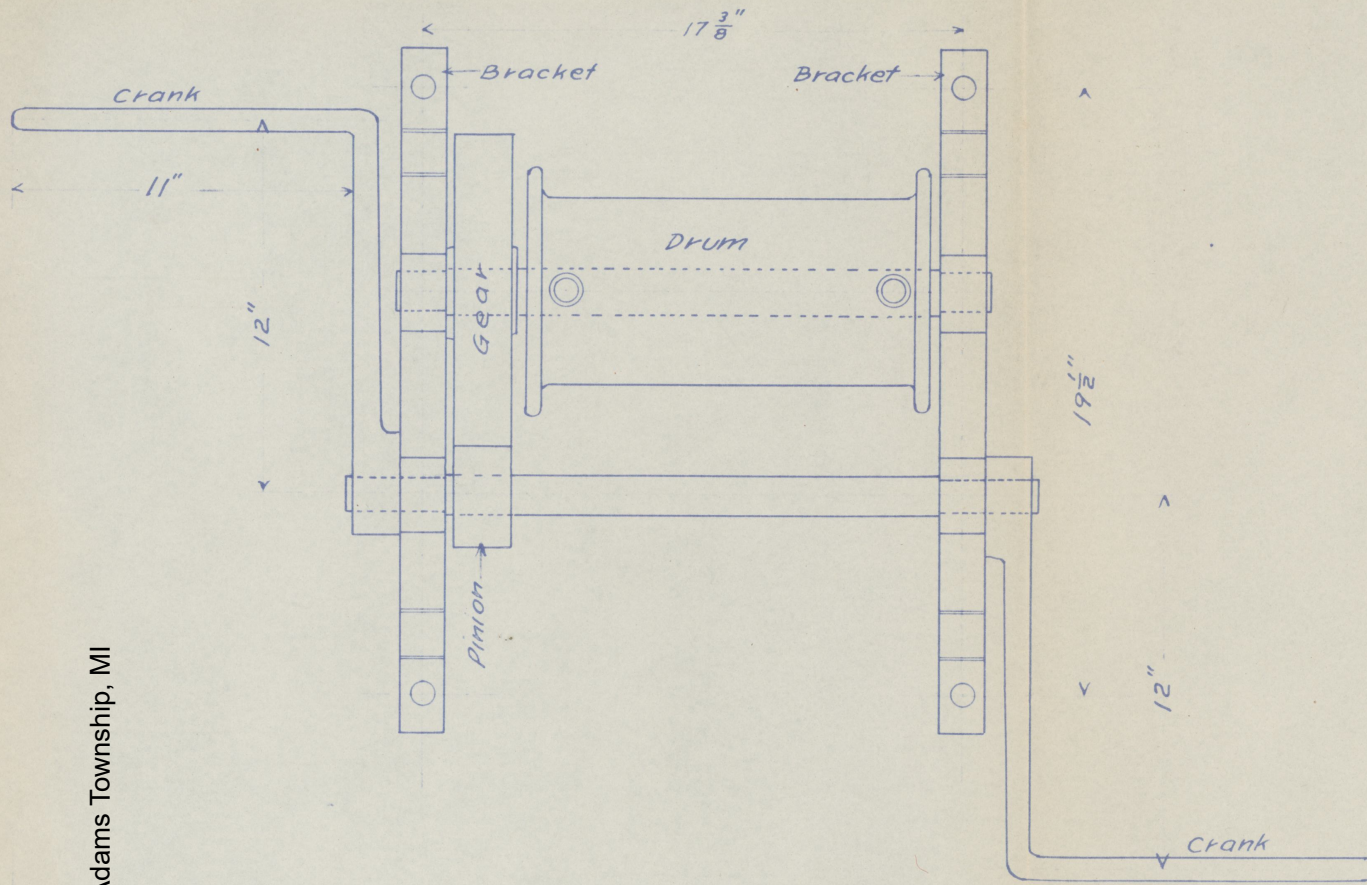


Adams Township, MI



For details See Shop-Sketches 150B, 402 And 403.  
See Also F.P. 1771, E-71 & E-72

ASSEMBLY OF  
MAN CAR WINCH  
scale, 3"=1'-0"







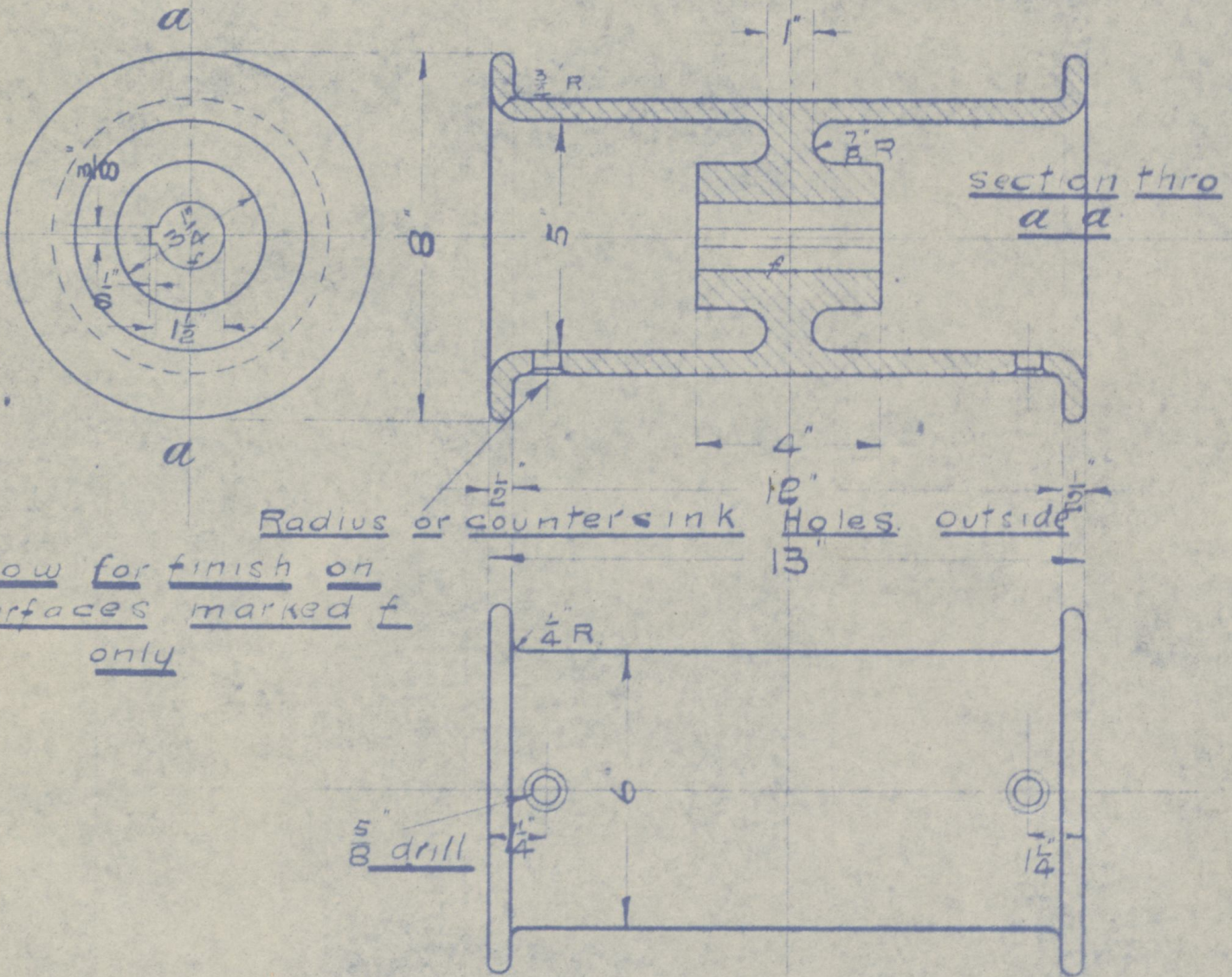
CHAMPION COPPER COMPANY

SHOP SKETCH

Subject: C.I. Drum for Man Car Winch Date April 26-1915.

Rough Wat = \_\_\_\_\_

Finished = \_\_\_\_\_



Allow for finish on surfaces marked f only

Radius or countersink Holes outside

Made by

Sketch No. **402.**

Keep This Sheet Clean and Return Same to Shop Foreman When Work is Completed



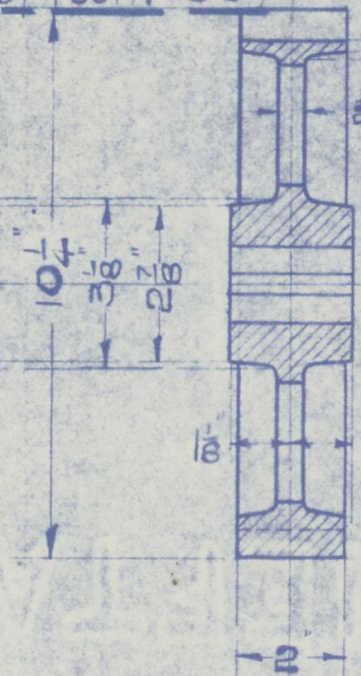
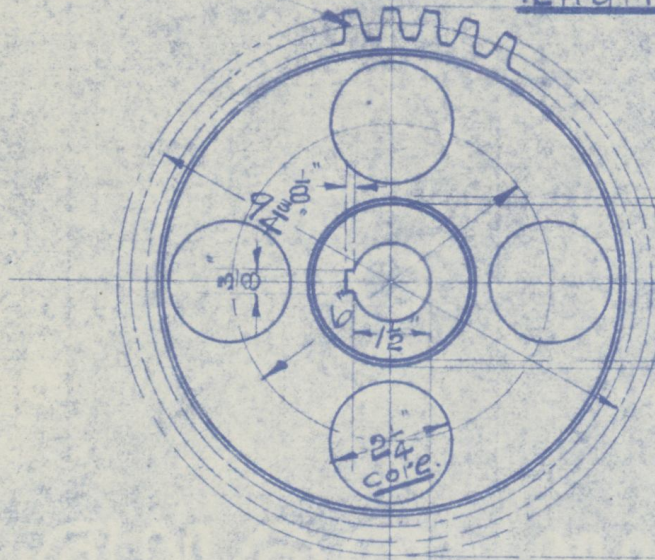
CHAMPION COPPER COMPANY

SHOP SKETCH

Subject: C.I. Gear and Pinion for date April 26-1915.  
Man Car Winch.

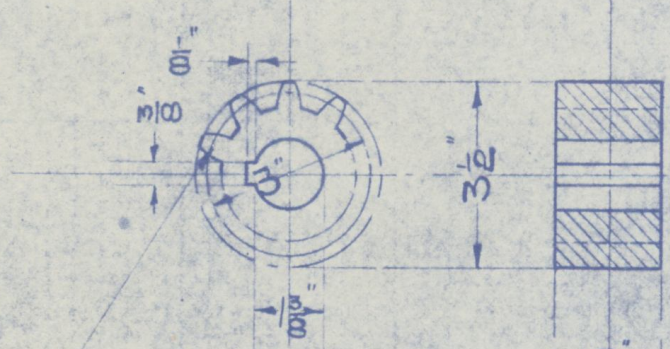
1915-37 G. CO.

39-Teeth 4-Pitch 9 3/4" P.D. C.P. 7854  
length of tooth .539



Rough Wat = \_\_\_\_\_  
Finished = \_\_\_\_\_

Gear (A)



12-Teeth 4-Pitch  
3" P.D. Circular Pitch 7854  
Length of tooth .539

Rough Wat = \_\_\_\_\_  
Finis " = \_\_\_\_\_

Pinion (B)

Made by EP

Sketch No. **403.**

Keep This Sheet Clean and Return Same to Shop Foreman When Work is Completed

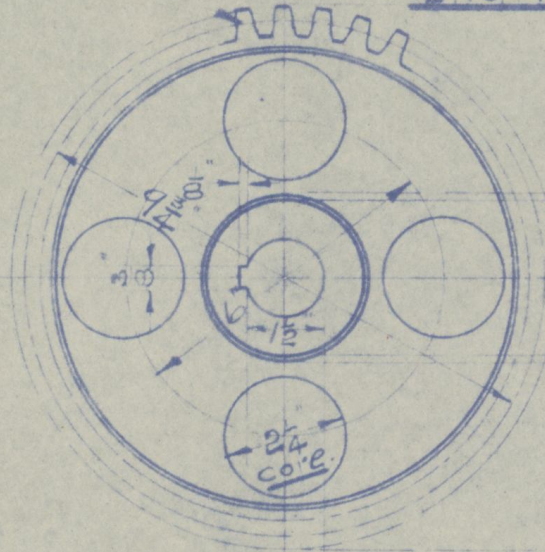


CHAMPION COPPER COMPANY

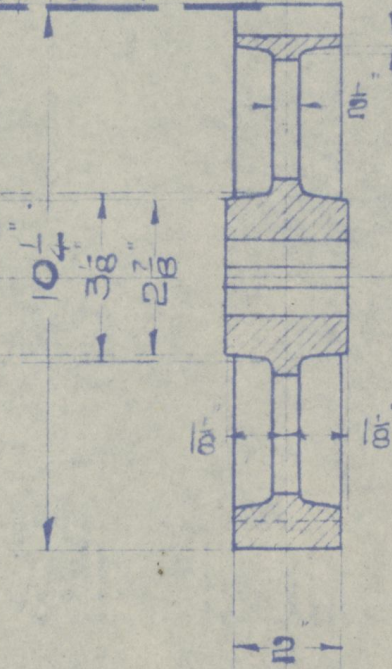
SHOP SKETCH

Subject: C.I. Gear and Pinion for Man Car Winch. Date April 26-1915.

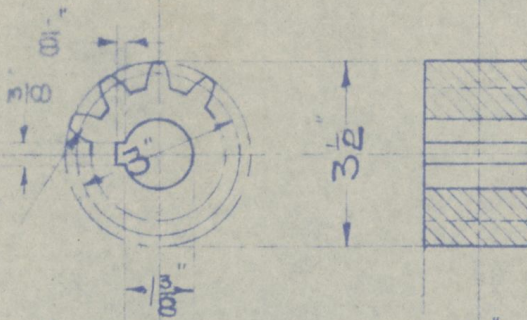
39-Teeth 4-Pitch 9 3/4" P.D. C.P. 7854  
length of tooth .539



Gear (A)



Rough Wgt = \_\_\_\_\_  
Finished = \_\_\_\_\_



12-Teeth 4-Pitch  
3" P.D. Circular Pitch 7854  
Length of tooth .539

Pinion (B)

Rough Wgt = \_\_\_\_\_  
Finis " = \_\_\_\_\_

Made by EP

Sketch No. **403.**







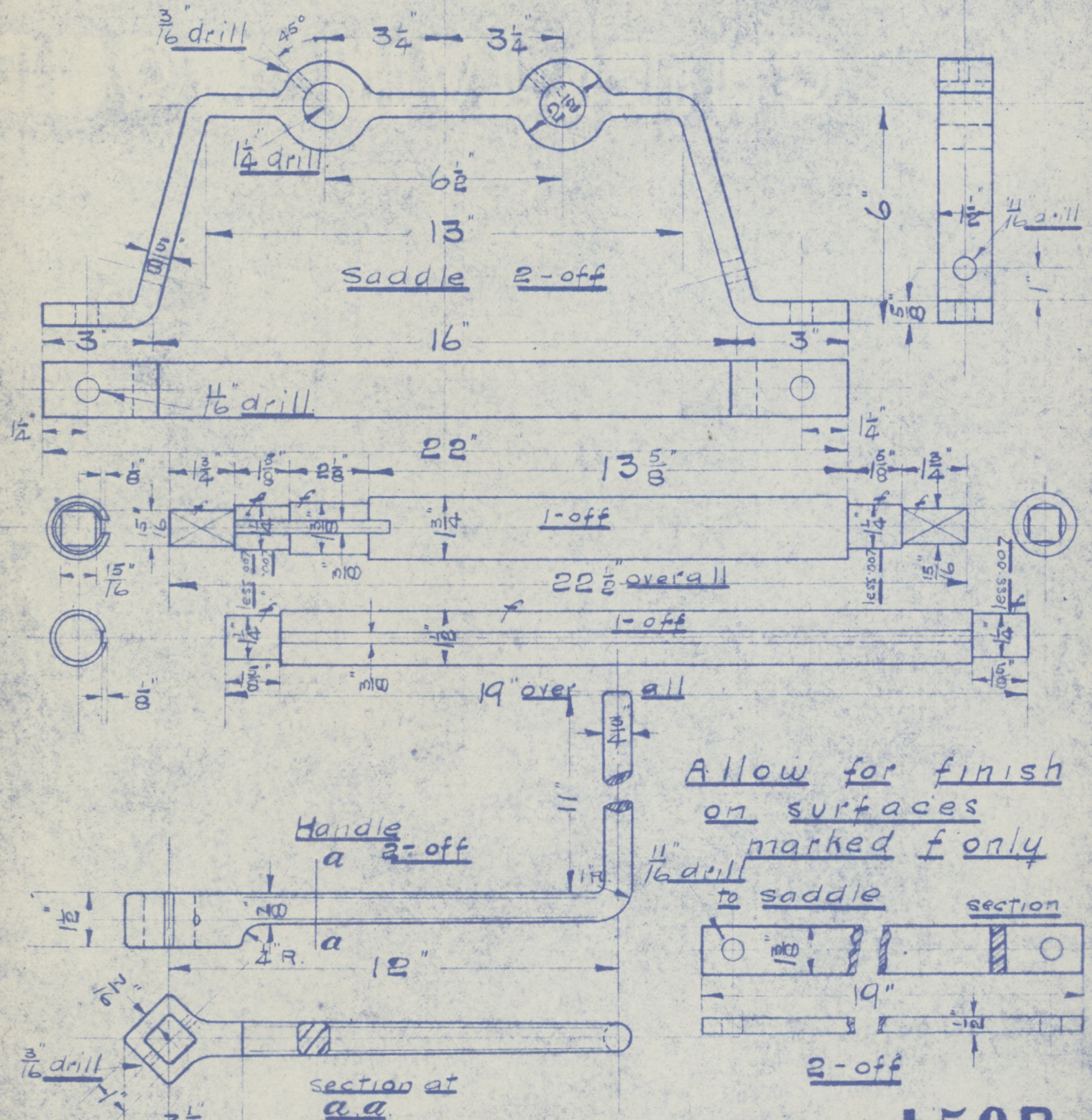
CHAMPION COPPER COMPANY

SHOP SKETCH

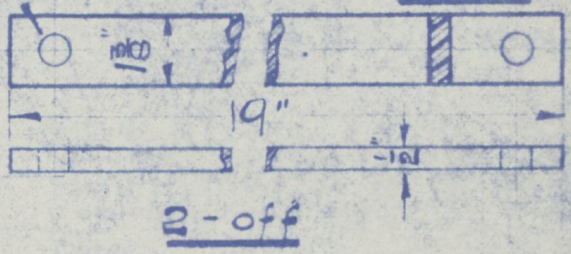
Subject: W.I. Saddle and Shaft etc  
for Man Car Winch.

Date April 28-1915.

CHAMPION & CO.



Allow for finish  
on surfaces  
marked f only  
11/16 drill  
to saddle



Made by EP

Sketch No. **150B.**

Keep This Sheet Clean and Return Same to Shop Foreman When Work is Completed