

No 591

CAST STEEL STERN FRAME FORGED IRON RUDDER FRAME

SCALE $\frac{1}{2}$ " = 1 FOOT

TO BRITISH CORPORATION REQUIREMENTS

OWNERS REQUIREMENTS

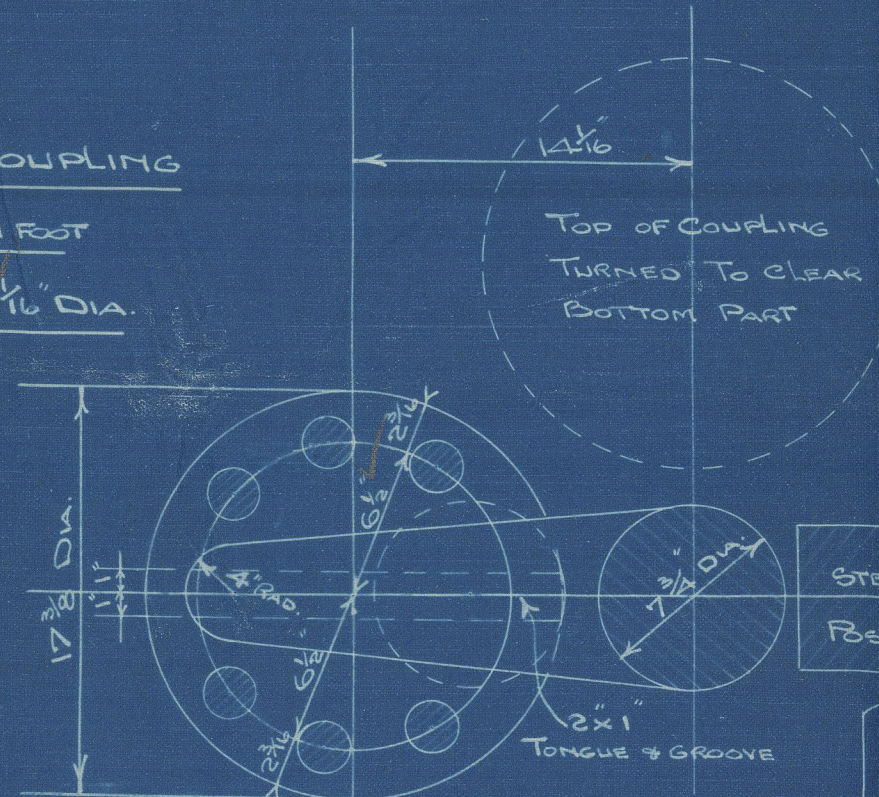
STERN FRAME INCREASED 33 PER CENT ABOVE RULE
RINTLES AND STOCK INCREASED $\frac{1}{4}$ " ABOVE RULE

RULE STERN FRAME = $7\frac{1}{2} \times \frac{1}{2}$ TO $6\frac{1}{2} \times \frac{1}{2}$
PROPOSED = $7\frac{1}{2} \times \frac{1}{2}$ TO $6\frac{1}{2} \times \frac{1}{2}$
RULE STOCK = $7\frac{1}{2}$ DIA + $\frac{1}{4}$ " = $7\frac{3}{4}$ DIA
RULE RINTLE = $8\frac{1}{2}$ DIA + $\frac{1}{4}$ " = 4"

SKETCH OF COUPLING

SCALE $\frac{1}{2}$ " = 1 FOOT

6 BOLTS $2\frac{1}{2}$ " DIA



DIMENSIONS OF SHIP
240'-0" x 34'-9" x 17'-0" MLO.
SPEED = 11 1/2 KNOTS

RUDDER HEAD CALCULATION

TOTAL IMMERSED AREA OF RUDDER
ABFT CR. LINE OF RINTLES = 70.50 SQ. FT.
CENTRE OF GRAVITY FROM
CR. LINE OF RINTLES = 2.49 FT.

$$d = .26 \sqrt{R.A.V.}$$

$$d = .26 \sqrt{70.50 \times 11.5^2}$$

$$d = .26 \times 11.5 = 3.0$$

$$d = 7.415$$

PROPOSED $7\frac{1}{2}$ DIA + $\frac{1}{4}$ " = $7\frac{3}{4}$ DIA

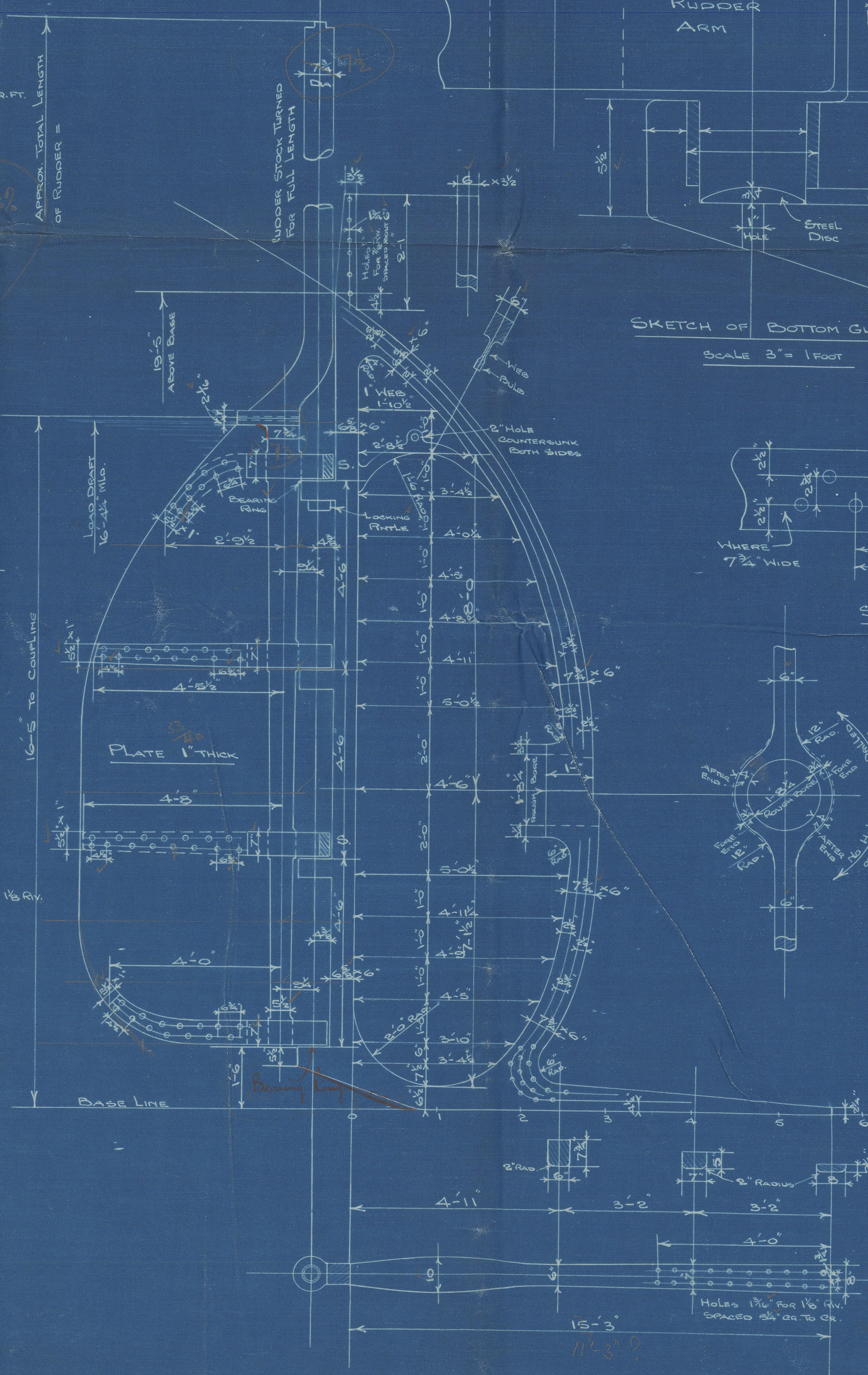
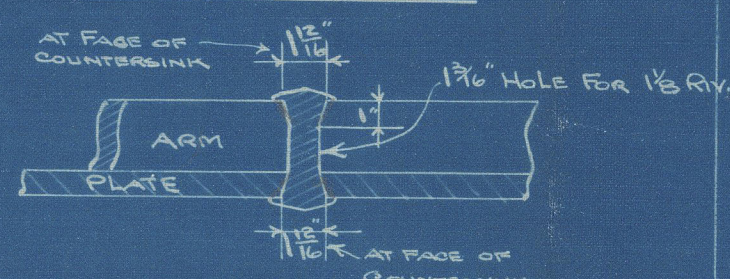
7 1/4

7 1/2

RIVETING IN RUDDER ARMS

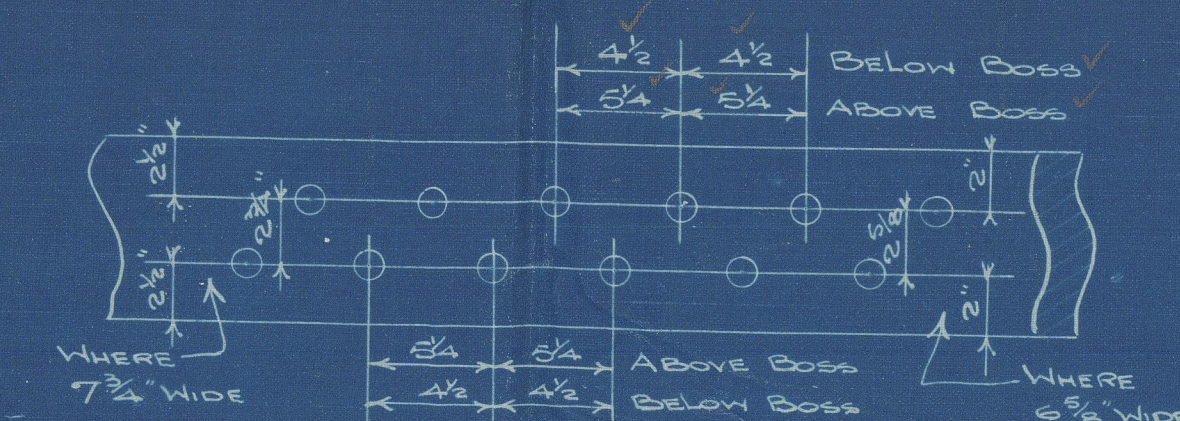
RIVETS $\frac{1}{8}$ " DIA. HOLES TO BE DRILLED
 $\frac{1}{16}$ " AND COUNTERSUNK ON OPPOSITE
SIDE TO PLATE, SPACED AS SHOWN
ON PLAN

SKETCH OF COUNTERSINK IN RUDDER ARMS



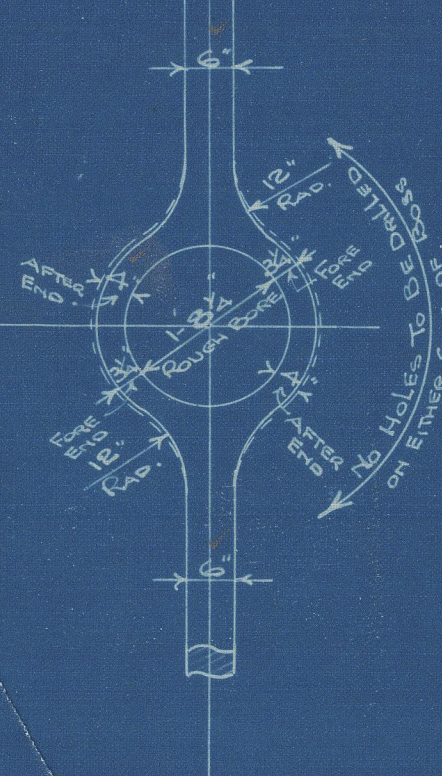
SKETCH OF BOTTOM GUDGEON

SCALE 3" = 1 FOOT



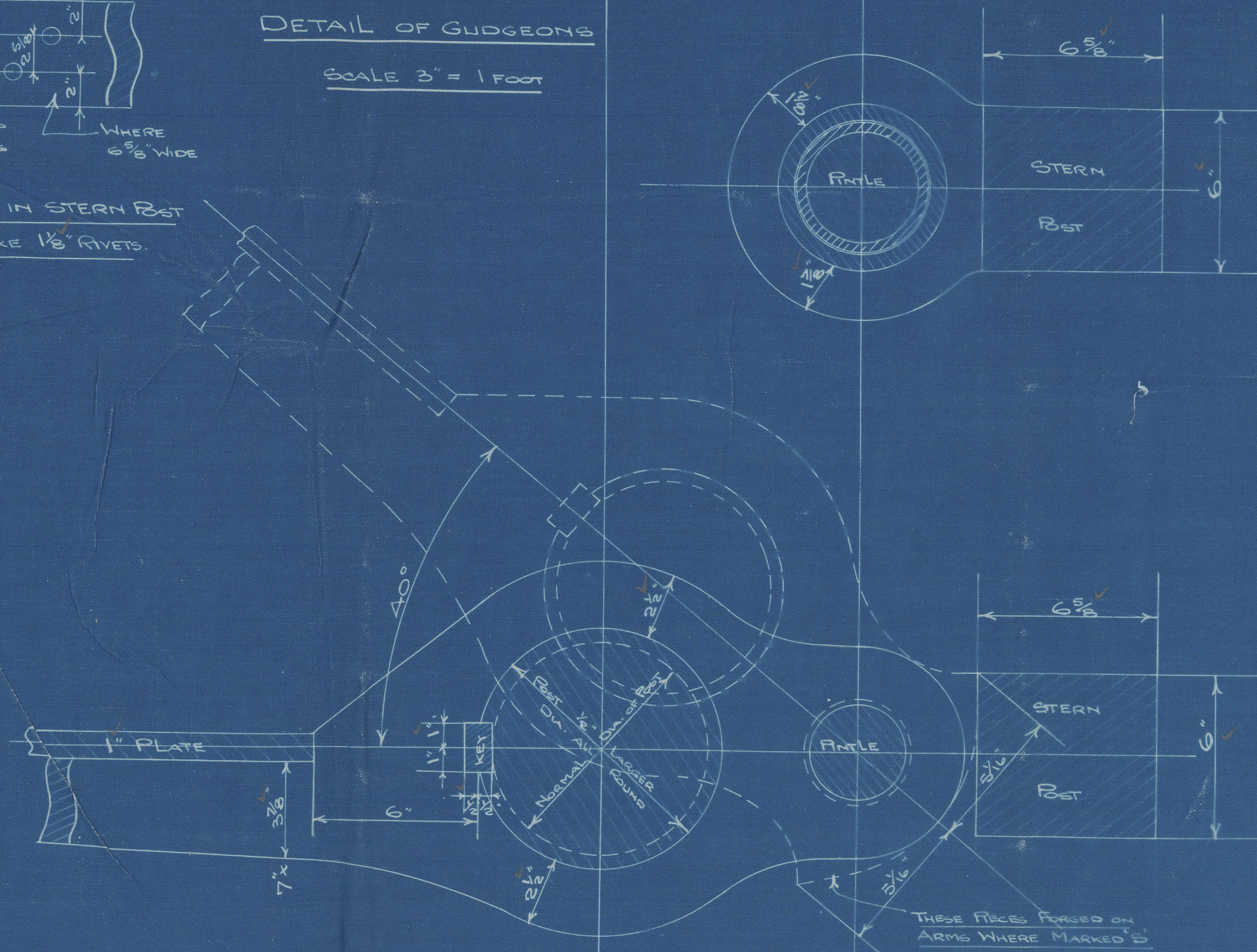
SKETCH OF RIVETING IN STERN POST

HOLES $\frac{1}{16}$ " DIA TO TAKE $\frac{1}{8}$ " RIVETS



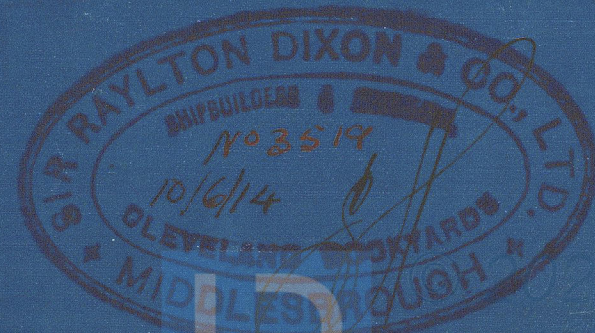
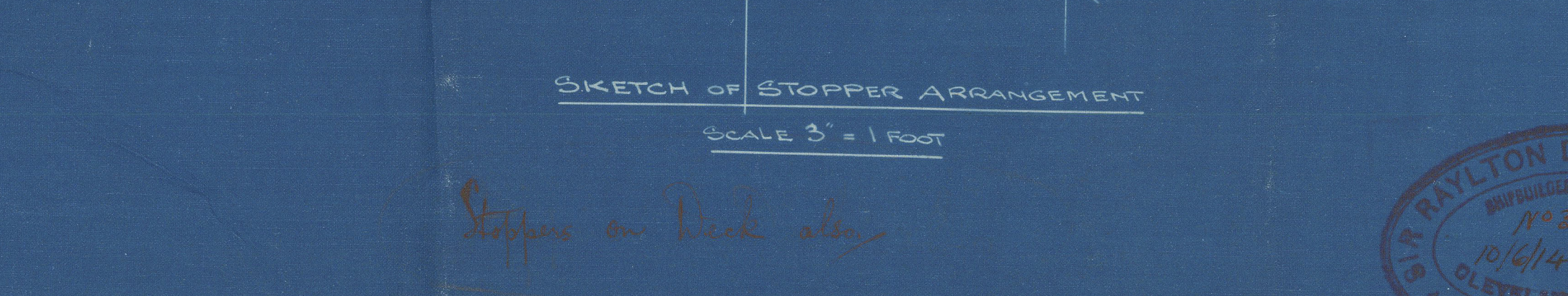
DETAIL OF GUDGEONS

SCALE 3" = 1 FOOT



SKETCH OF STOPPER ARRANGEMENT

SCALE 3" = 1 FOOT



Sir R. Dixon's 591

240' x 34'-9" x 17'-0"

Rudder + Sternframe
S/B "Princess Irma"

EX
Now
Sto Cheshire Coast

Now
CAID ALLAL ★

RECORDS DEPT.
LONDON

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Foundation

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