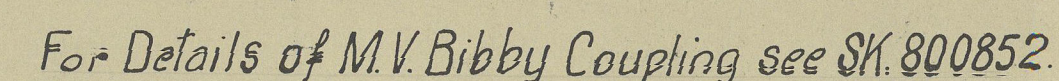


5-9 $\frac{3}{8}$ " Overall.



32 Drawfile on full width of
Teeth on Pinion and Gear.

MATERIAL.	PHYSICAL PROPERTIES OF MATERIAL.			BILL OF MATERIAL.						
	Ultimate Tensile Stress	Yield Point.	Elongation.	Item	Cat	Req	Description.	Mat'l	Dwg No	Note
Forged Nickel Steel.	Transverse 40,455 Lbs./sq. In. Longitudinal 46,785 " "	60% U.T.S.	15%, 23%	1		1	Gear Wheel Centre Pat# *17393.	C.I.	B.672749	Old.
" Steel.	31/35 Tons/d'	45% U.T.S.	26%	2		1	H.S. Pinion Item*2 Forging SK. 800743.	F.S.	C.521861	P.O. 9 Oct. 10
" "	35 Tons/d'	17½% U.T.S.	25%	3		1	Gear Wheel Rim " #3 " " " "	"	D.652075	" "
" "	48 Tons/d'	30% U.T.S.	17%	4		1	" Shaft " #1 " " " "	"	D.521561	" " 113
" "	32/37 Tons/d'	50% U.T.S.	25%	5		1	Flexible Shaft " #4 " " " "	"	C.521857	" " 110
" "	27/32 Tons/d'	50% U.T.S.	25%	6		1	Coupling Claw " #5 " " " "	"	B.573583	" " 101
" "				7		1	" Sleeve " #6 " " " "	"	F.373586	" " 102
				8		1	Spindle Looking Collar.	"	A.370646	"
				9		1	Half Split Key. (Long Half)	"	D.652076	"
				10		1	" " (Short Half.)	"	D.652076	"
				11		12	¾ Whit. Screwed Pegs - 2 ½". & cut off to suit Job.	BK SH Bar	D.523351	Shack Mfg.
				12		3	Coupling Bolts. (Flat as per Detail Dwg.) Flex. Shaft.	F.S.	D.279365	S.S. 1355
				13		3	3/8 Hex. Nuts for Item #12.	BK SH Bar	D.160002	Stock
				14		1	Oil Catcher for Shaft End. T.20600.	B.10.	C.522782	New
				15		1	Coupling Nut. Item #1.	F.S.	D.655677	"
				16		1	Grab Screws for Coupling Nut. Item # 2 ½ Whitel.	BK SH Bar	D.655677	Stock
				17		1	Aligning Gauge A = .6209. Item #1.	Tool SH.	D.523351	"
				18		2	Half Keys. (Flex. Shaft) (Long Halves.)	5/8" x 1/4"	D.652077	Made Apr. 20, 1910
				19		2	" " (") (Short ")	"	D.652077	Order B. 304-43
				20		2	Aligning Collar Half Rings. T.17451.	C.I.	D.652086	"
				21		12	Fitted Bolts for Coupling Sleeve.	F.S.	D.653210	RS. 1334
				22		12	5/8 Fin. Hex. Nuts for Item #21.	BK SH Bar	D.160002	Stock
				23		12	¾" x 1" Fin. Hex. Hd. Tap Bolts (Heads drilled for wire).	"	D.160199	"
				24		12	1/8" x 1/4" Split Cotter Pins. for Item #21.	Steel.	D.11909.	"
				25		38 Ft.	3/32 Dia. Wire for Item #23.	"	"	"
				26		2	¾ x 7" S. F. Hex. Hd. Tap Bolts. for Item #20	BK SH Bar	D.160012	"
				27		2	¾" S.F. Hex. Nuts for Item #26.	BK SH Bar	D.160035	"
				28		3	3/16" x 1/4" Split Cotter Pins. for Item #12.	Steel.	D.11909.	"
				29		1	Handle for Aligning Gage. 3/16 Dia x 1 1/4 Lg Item #2.	BK SH Bar	D.523357	"
				30		1	Feather Key for Item #4 Wheel Seat.	F.S.	D.652141.	"
				31		1	Barring Spanner Item #1.	Hex. Shift Steel Plate.	C.522785	"
				32		1	Lever Item #2.	"	C.522785	"
				33		4	5/8" x 1/8" S.F. Hex. Hd. Tap Bolts. for Items #31, 32.	BK ST.	Std. 160912	Stock

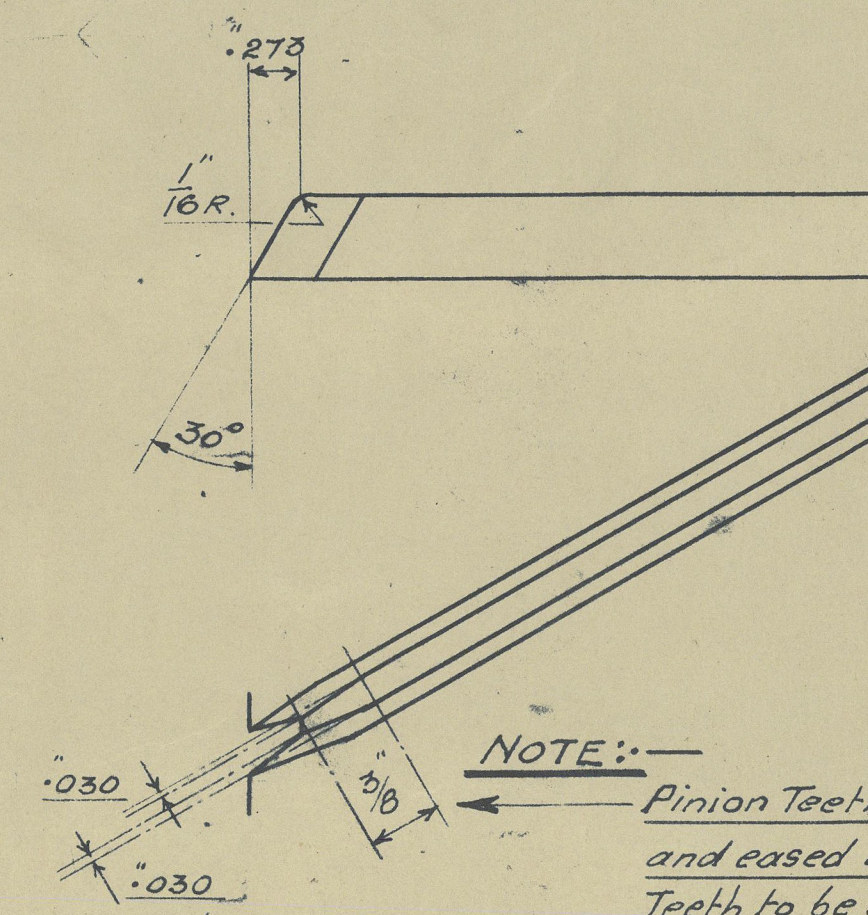
(32) Barring Spanner Dwg# C.522785.

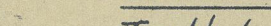
(15) For record of this end as fitted on S.S.

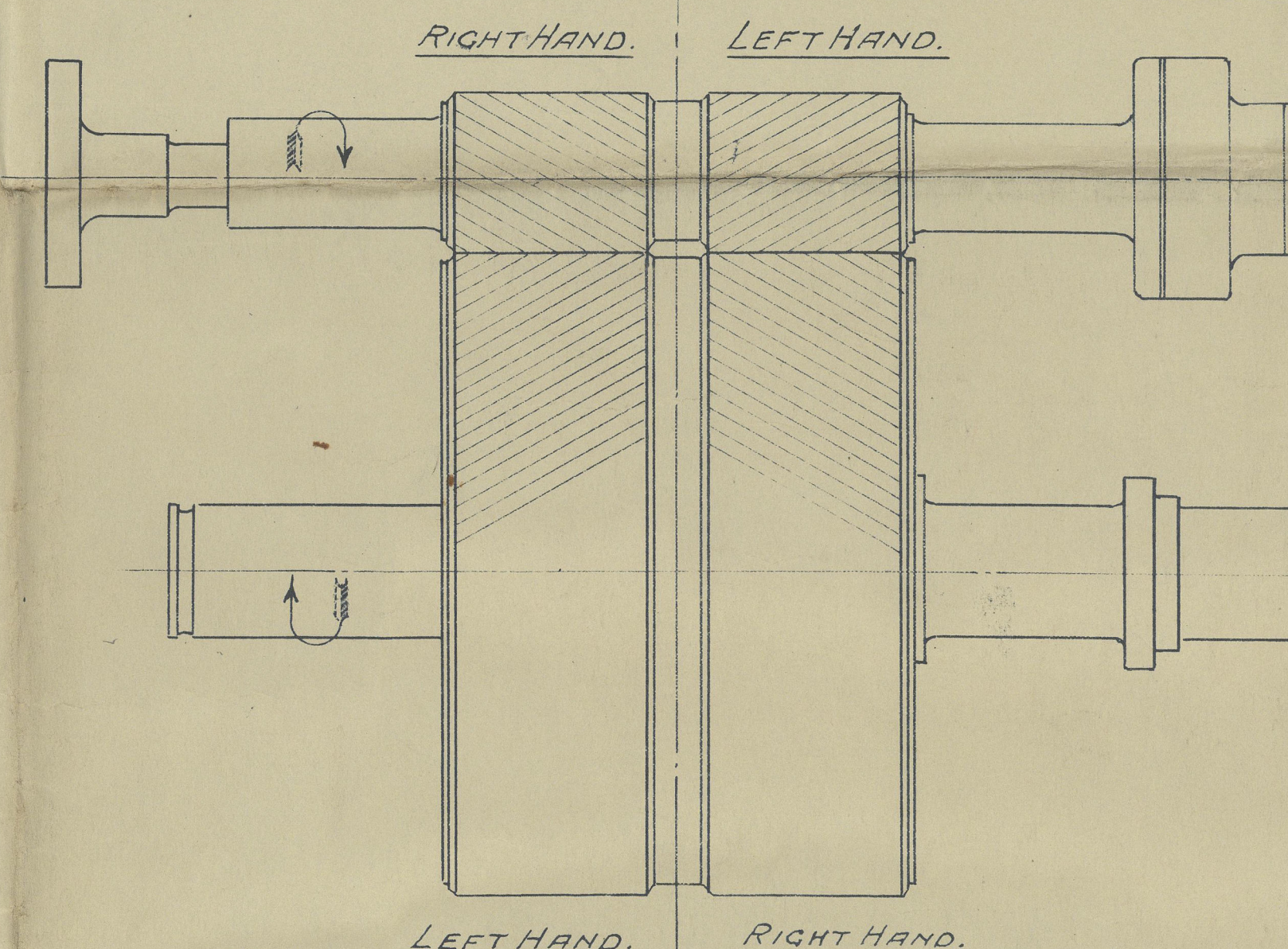
(16) "City of Canterbury" on S.O. 115570/2 see:-
SK.800760 for Item #5
C.521860 for Item #14
D.279495 for Item #15+16.
Barring Spanner not fitted.

(33)

(31)



NOTE:-

Pinion Teeth to be chamfered
and eased as shown, Wheel
Teeth to be chamfered only.



VIEW SHOWING HANDLING OF GEARS

G. K. F.
27/5/33

SK. 800853.

PARTICULARS OF GEARS.	PINION	WHEEL
Number of Teeth.	33.	157.
Pitch Circle Diameter.	8'3555.	33'636.
Diameter over Teeth.	8'7265.	34'007.
R.P.M.	3000.	750.
Spiral Angle of Teeth.	29° 58'	9°
Circular Pitch.		1'67306.
Centres.	20	9959.
Hub.		7/12" Lead.
Machine cut on.		

All Dimensions with Symbols are to be made to Gauges
Any size between Limits is correct.
Unlimited overall dimensions to be correct within \pm
Unlimited Machining

METROPOLITAN-VICKERS ELECTRICAL CO. LTD.
MANCHESTER, ENGLAND.
DETAIL ASSEMBLY & GEAR CUTTING
OF ROTATING ELEMENT.

21" S. R. GEAR

SCALE = 3 = 1 foot. S.O. 115570/2
S.S. "City of Canterbury"

SK.800853

ice" } = Bol. 11/50

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bury

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Lloyds Reg
F. 11

Foundation