SADDLE

The Saddle is shown in detail on drawing . The operation of the two traverses is by means of a single worm mounted in a drop box and the positioning of the curved lever on front of the apron selects either the longitudinal or the cross traverse. A further small lever with a red knob releases the drop box. This lever is also released mechanically when the Knock-off rod at the left hand side of the apron is in contact with the Stop fitted to the lathe bed.

All shafts in the apron have double bearings.

The Bronze half nuts for screwcutting are engaged with the leadscrew when the lever is in the upward position.

The cross Feedscrew is mounted in a housing so designed that the housing, screw and gear are easily removed without dismantling the apron. This is a useful feature when replacement is necessary or removal of the cross slide is desired. The cross feedscrew is cut 10 threads/inch.

The Swivel Slide is mounted on a sturdy pillar on the Cross Slide, released or tightened by 2 socket screws.. These screws impinge on tapered circular segments which clamp the unit effectively and force id down tightly on its base. The Swivel Slide is graduated up to 90 degrees either side of zero.

A large size micrometer dial having adequate width between graduations is provided both for the Cross Slide and Top Slide. This is mounted on a sleeve on which it can quickly be turned against spring pressure to bring the graduations to the desired position. Small clamping screws which easily become lost or damaged are thus dispensed with.

TAILSTOCK

The tailstock has quick action clamping to the bed and no spanners are required for its operation. A malleable clamp under the bed guides is pivoted at the right-hand end, the clamp bolt passing at a slight angle, right through the tailstock to the top where it is easy of access. Adjustment for taper turning is provided but if taper turning to any serious degree is required it is recommended that the Taper Turning attachment supplied as an extra should be used. The steel Barrel is fitted with an inserted bronze nut, easily replaceable when worn.

INSPECTION

Every component of the "Raglan" lathe undergoes a rigid inspection both during and after machining and those not conforming to the specified limits are rejected. Sub-assemblies are again inspected and the lathe, when finally assembled is fully tested for alignment.

LATHES ARE ALWAYS TESTED IN OUR WORKS IN THE FREE STANDING POSITION. i.e. not bolted down to any foundation.

The lathe is run under its own power for several hours and every motion examined, during which period the Catch Plate supplied with it is turned up in position and examined for finish and accuracy.

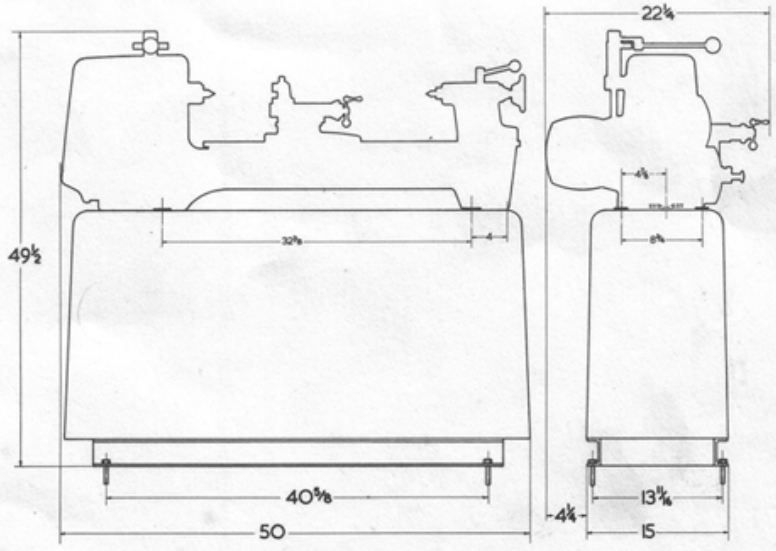
A SIGNED INSPECTION SHEET IS ISSUED WITH EVERY MACHINE.

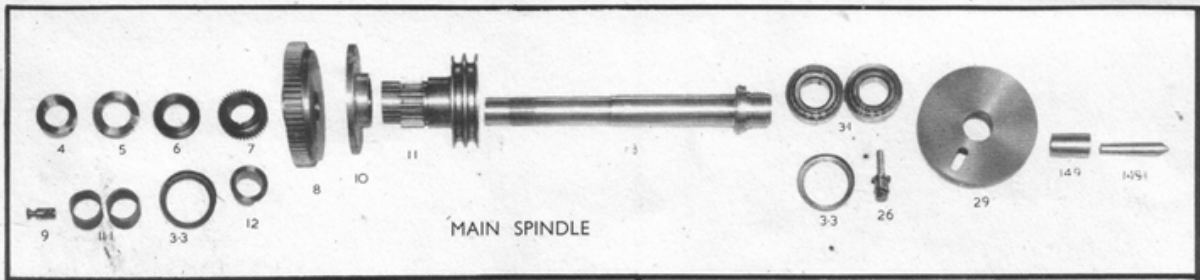
MAINTAINANCE

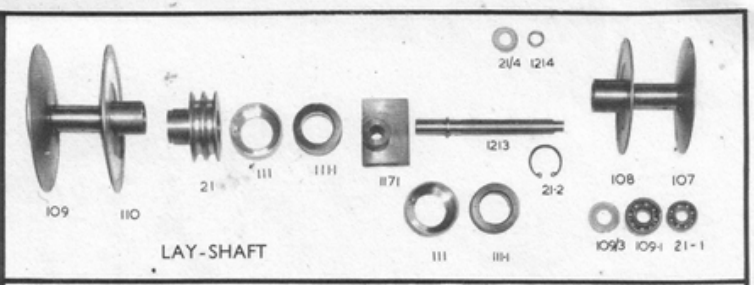
The life of a Lathe, its freedom from trouble and the accuracy of its work is very much dependent on careful maintenance. An appreciative Operator will therefore give a little time to keeping it clean, periodic oiling and adjustment and the early replacement of worn or damaged parts.

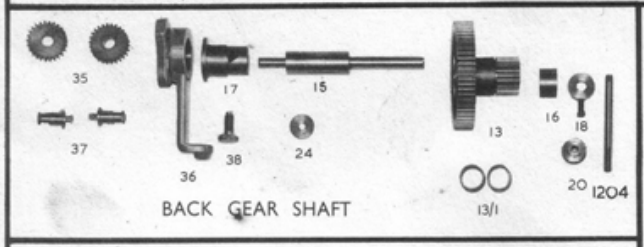
The Variable speed Drive will not give its full range of speeds unless in correct adjustment and the remarks on page 4 should be carefully studied.

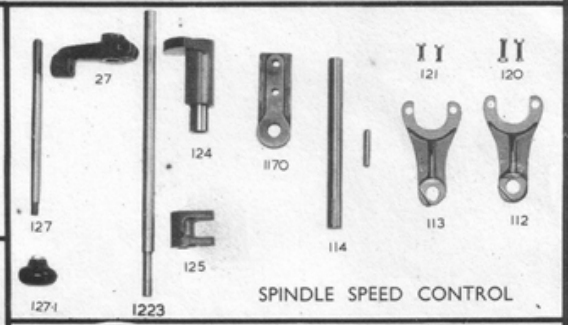
Saddle and Top Rest Slides should be periodically attended to. At the risk of appearing obvious, we would emphasise that any lathe should be kept as clean as possible as the entrance of chippings and swarf into inaccessible places soon causes wear and probably damage.

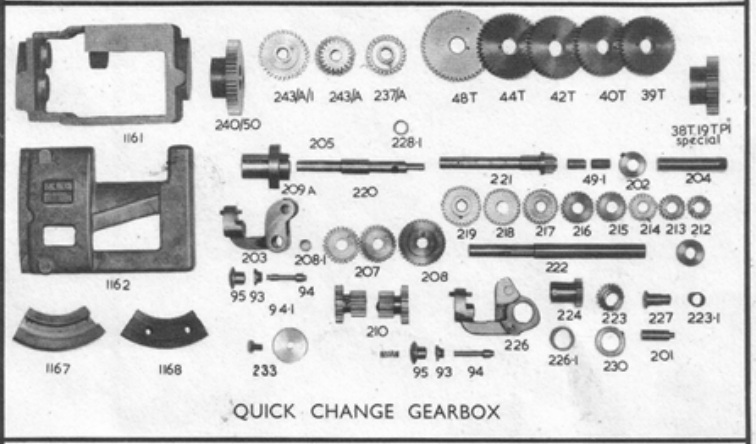


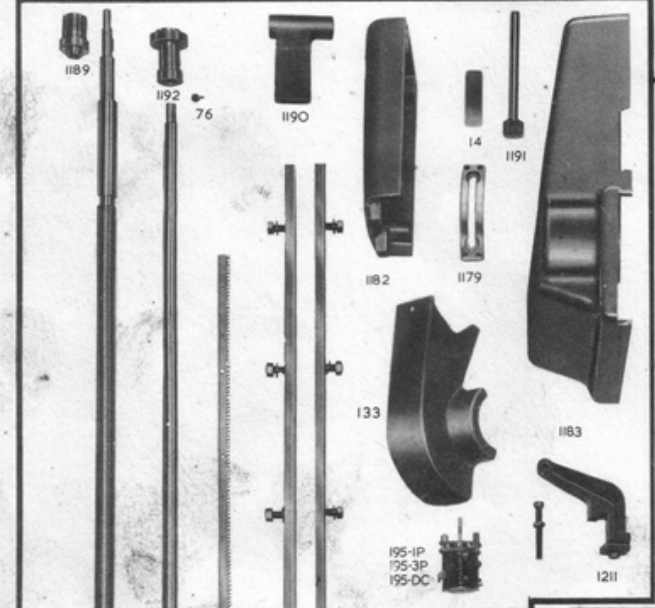


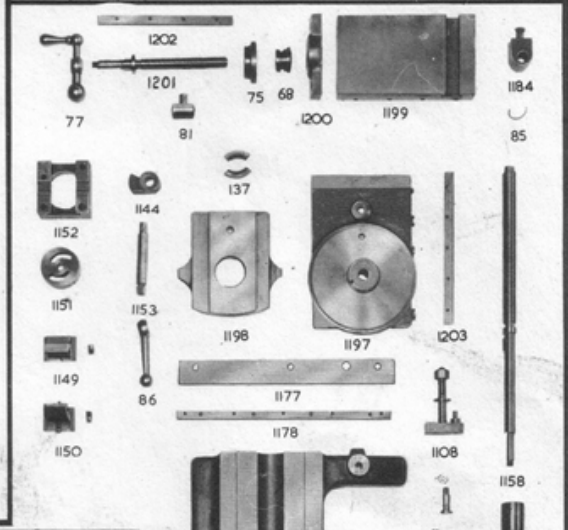


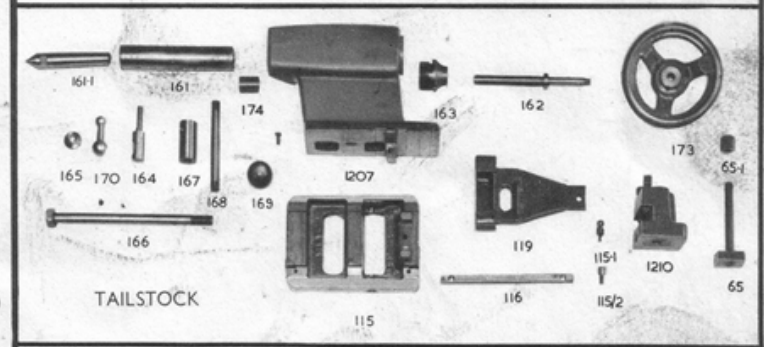












PARTS LIST

For description see next page

SPARE PARTS LIST

FOR ILLUSTRATIONS REFER PREVIOUS PAGE

3	Spindle		5.18. 6
3-1	Taper Roller Bearings(2)	ea.	1.17. 6
3-2	Dust Cover,internal (2)	ea.	3. 6.
3-3	Dust Cover, outer (2)	ea.	3. 6.
4	Nut		9. 7.
5	Thrust Collar		5. 3.
6	Spacing Bush		8. 0.
7	Drive Gear 38 T		14. 6.
8	Gear 67 T		3. 9. 0.
9	Lock Pin		4. 7.
10	Catch Plate		18.11.
11	Drive Pulley Gear		3. 1. 6.
11-1	Oil Retaining Bush (2)		4.10.
12	Bronze sleeve		9. 0.
13	Back Gear		2.12. 6.
13-1	Oilite Bushes		4. 0.
14	Index Plate, Tumbler		3. 3.
15	Back Gear Shaft		2. 6. 3.
16	R.H. Bearing Bush		5. 5.
17	L.H. Bearing Bush		10. 6.
18	Stop Collar		2. 9.
20	Knurled Nut		3. 3.
21	Double groove pulley		1.12. 7.
21-1	Ball Bearing		6. 0.
21-2	Circlip		1. 0.
21-3	V Belts (2)	ea.	4. 2.
24	Washer		2. 1.
26	Driver Plate Pins (2)	ea.	5. 9.
27	Control Rod Connector		10. 7.
29	Catch Plate		1.10. 6.
31	Bed Strips (2)	pair.	9. 6. 0.
35	Tumbler Gears (2)	ea.	11. 6.
36A	Tumbler Bracket		1. 6. 3.
37	Studs(2)	ea.	6. 0.
38	Thumb Screw		3. 6.
43	Gear Sleeve		11. 3.
44	Stud B		14. 8.
45	Change Wheels:- see end of last column.		
46	Gear Sleeve		7.10.
47	Stud C		8. 2.
48	Gear. 48T. (2)	ea.	12. 8.
49-1	Bush		1.11.
50	Sleeve		9. 0.
54	Washer		3. 1.
60	Slip Washer		4. 7.
65	T Bolt for Toolpost		3. 6.
65-1	Nut for above		8.
68	Micrometer Dial Sleeve		7. 9.
75	Micrometer Dial		12. 3.
76	Shearing Pin		10.
77	Ball Handle		7. 0.
81	Swivel Slide Nut		8. 6.
85	Clip Spring		4.
86	Ball Handle		7. 0.
93	Nut Plunger		3. 3.
94	Plunger		5. 8.
94-1	Spring		5.
95	Knob		4. 0.
102	Feedshaft Gear		15. 0.
103	Worm and Spur		14. 6.
104	Worm Shaft		3. 4.
107	Inclined Flange		1.19. 0.
108	Sliding Flange		1.14. 0.
108-1/C	V-Belt, Main Drive.		7. 6.
109	Inclined Flange		2.16. 3.
109-1	Ball Bearing		6. 6.
109-3	Oil Seal		2. 9.
110	Sliding Flange		2. 2. 9.
111	Thrust Washer Housings		9. 0.
111-1	Thrust Bearing		11. 0.
112	Operating Fork.Layshaft.		11. 9.
113	Operating Fork.Motor.		11. 9.
114	Operating Shaft.		7. 2.
115	Tailstock Base		1.15. 0.
115-2	Cone Screws	ea.	2. 6.
116	Adj. Strip		4. 8.
119	Clamp Plate		10. 4.
120	Retaining Studs(2)	ea.	1. 7.
121	Retaining Studs(2)	ea.	1. 7.
124	Control Rod Bracket		12. 8.
125	Operating Claw		9. 4.
127	Control Rod		6. 0.
127-1	Knob		2. 6.
129	1 h.p. Motor Footplate.		15. 7.
133	Motor Pulley Guard		1. 1. 9.
137	Clamp Segments (2)	pair.	8. 3.
148	Screwcutting Chart.Plain.		5. 8.
149	Spindle Reducing Bush		7. 3.
149-1	Spindle Centre		7. 6.
161	Tailstock Barrel		1.10. 0.
161-1	Tailstock Centre		7. 6.
162	Screw		14. 0.
163	Bearing		13. 4.
164	Barrel Clamp Bolt		9. 0.
165	Washer		1. 8.
166	Clamp Bolt		6. 8.
167	Clamp Nut Handle		10. 3.
168	Rod		1. 9.
169	Bakelite Knob		1. 9.
170	Lever Ball Handle		5. 6.
172	T-Locking Piece		2. 6.
173	Handwheel		13. 7.
174	Tailstock Barrel Nut		7. 6.
195-1P)			1.10. 0.
195-3P)	Santon Switch		1.10. 0.
195-DC)			1.10. 0.
201	Pin, Tumbler Gears		2. 6.
202	Collar		4. 9.
203	Tumbler Bracket		18. 0.
204	Tumbler Shaft		3. 6.
205	Selector Chart		4. 6.
206	Metric Thread Chart		6. 0.
207	Tumbler Gear 27 T.(2)	pair.	9. 4.
208	Tumbler Gear 36T		9. 6.
208-1	Oil Retaining Bush		2. 3.
209A	Stud 'D' Sleeve		7. 3.
210	Twin Gear (2)		18. 3.
212	Gear 16T. Inside Gearbox		7. 0.
213	" 18T. " "		6. 3.
214	" 20T. " "		7. 0.
215	" 22T. " "		7. 3.
216	" 24T. " "		8. 0.
217	" 26T. " "		7.10.
218	" 28T. " "		9. 6.
219	" 30T. " "		11. 1.
220	Shaft, Stud D		18. 7.
221	Change Gear Shaft with		1.17. 5.
222	Sector Shaft. (collar.		12. 0.
223	Idler Gear, Sector		9. 6.
223-1	Oil Retaining Bush		2. 0.
224	Sliding Gear, Sector		17. 0.
226	Sector Bracket		1. 7. 3.
226-1	Oil Retaining Bush		3. 0.
227	Pin, Idler Gear		6. 4.
228-1	Oil Retaining Bush		2. 0.
230	Collar, Sliding Gear		3. 3.
233	Washer, Stud D		3. 3.
237A	44T Gear		1. 1. 0.
240	50T Gear		1. 1. 6.
243A	Gear		16.10.
243A/1	Gear		10. 7.
641	Latch		12. 3.
646	Knock-off Shaft		10.10.
647	Knock-off Handle		15. 6.
658	Stop Bar		3. 3.
1108	Saddle Lock		9. 4.
1131	Apron		5.10. 6.
1132	Saddle		7.14.10.
1133	Rear Bracket		3. 5. 0.
1134	Worm Box		1. 1. 7.
1135	Feed Change Lever		10. 4.
1136	Worm Wheel		1.15. 9.
1137	Stop Pin for 1135		1. 7.
1138	Gear 18T 16 DP.		9. 4.
1139	Gear & Shaft 18T		16. 1.
1140	Gear & Shaft (Hand Feed)		1.11. 6.
1141	Gear 42T (Hand Feed)		18. 0.
1142	Gear 56T		1. 9. 0.
1143	Rack Pinion		1. 0. 6.
1144	Interlocking Cam		6. 9.
1145	Pin (Interlocking)		2. 3.
1146	Worm		16. 6.
1147	Cover		4. 9.
1148	Release Rod		3. 3.
1149	Half Nut, Top		1. 8. 3.
1150	Half Nut, Bottom		1. 8. 3.
1151	Cam		10. 1.
1152	Guide		1. 7. 0.
1153	Guide Pin		9. 4.
1154	Rocker		1. 2. 1.
1155	Pin (for Gear 1138)		6. 3.
1156	Pin		3. 1.
1157	Gear on Cross Feed Screw.20T.		15. 9.
1158	Cross Feed Screw		1.11. 7.
1159	Micrometer dial 2½"		12. 0.
1160A	Micrometer dial Bearing		1. 2. 4.
1161	Norton Gear Box		3. 2. 0.
1162	Norton Gear Box Cover		2. 4. 6.
1163	Cover Plate, Plain Lathe		2. 1. 0.
1164	Washer		3. 3.
1165	Washer		3. 3.
1166	Gear and Shaft		2. 4. 0.
1167	Segment with T slot		12. 1.
1168	Segment for Idler Gear		10. 9.
1170	Fork Rod Bracket		8.10.
1171	Layshaft Housing		8. 1.
1172	Stud A		1. 4. 0.
1173	26T Gear 14 DP		11. 3.
1174	52 Gear 14 DP		1.11. 1.
1175	Quadrant		1. 3.11.
1176	Saddle Front Strips		6. 6.
1177	Saddle Rear Strips		6. 6.
1178	Saddle Adjusting Strip		2. 3.
1179	Index Plate (Back Gear)		7. 6.
1180	End Cap for 1148		3. 0.
1181	Bed		29. 0. 6.
1182	Cap		1.15. 3.
1183	End Guard		4.11. 6.
1184	Cross F/Screw Nut		19. 6.
1185	Leadscrew		5.15. 6.
1186	Feedshaft		1. 7. 9.
1187	Thrust Bearing Caps		4. 6.
1188	R.H. Bracket		1.15. 0.
1189	Clutch		19. 1.
1190	Back Guard Hinge Bracket		11.10.
1191	Back Guard Hinge Pin		7. 6.
1192	Feedshaft Gear 28T		1. 4. 9.
1193	Body		19.10.
1194	Dial		6. 4.
1195	Dial Shaft		6. 3.
1196	Swivel Pin		6. 3.
1197	Cross Slide		3.10. 0.
1198	Swivel Slide		2.10. 0.
1199	Top Slide		3. 7. 8.
1200	Top Slide Screw Housing		10. 3.
1201	Top Slide Feedscrew		1.18. 0.
1202	Top Slide Adj. Strip		7. 9.
1203	Cross Slide Adj. Strip		7. 9.
1204	Back Gear Tube		4. 0.
1205	Rack		1. 2. 1.
1206	Worm Box Handle		6. 6.
1207	Tailstock		1.18. 5.
1208	Switch Box		12. 9.
1209	Switch Box Cover		9. 0.
1210	Tool Post		19. 6.
1211	Stop Bracket		16.10.
1212	Stop Bracket 4 Way		2.12. 6.
1213	Layshaft		1. 4. 9.
1214	Locking Collar		2. 4.
1215	Washer for Layshaft		2. 4.
1216	Bush		2. 4.
1220	Latch Swivel Pin		9. 3.
1221	Latch Stop Rod		4. 7.
1222	Guard for Cross Slide		5. 6.
1223	Control Shaft		4.11.
1227	Tool Tray		5. 0.
1228	Tool Tray Support		3. 6.
1229	Bush		6. 3.
1230	Bush		4. 9.

CHANGE WHEELS. For Plain Lathe.

16 D.P. 30T. 32T. 36T. ea. 9. 0.

42T. 44T. 45T. 48T. 52T. 56T. ea. 12. 8.

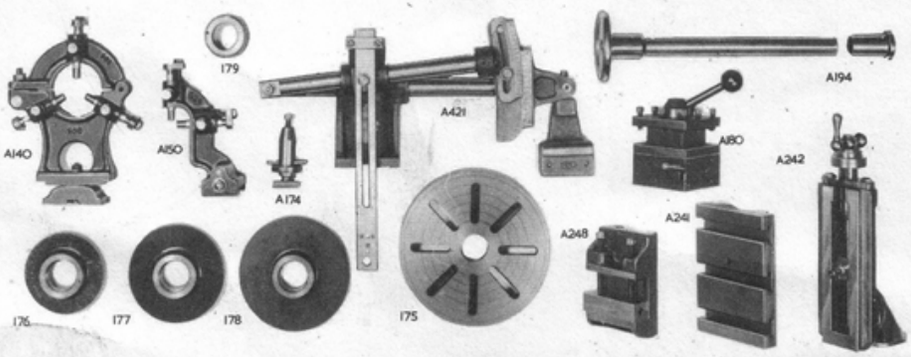
For Gearbox Lathe.

14 D.P. 39T. 40T ea. 17. 6.

42T. 44T. ea. 18. 0.

48T. 1. 1. 4.

Change wheels available for special pitches. Price on application.



ACCESSORIES.

A-140 Fixed Steady Rest, 3-pt. - 5. 2. 6.

A-150 Travelling Steady Rest - 3.12. 6.

A-174 Ring and Rocker Toolpost - 2.18. 0.

A-175 Faceplate 8½" dia 3.12. 6.

176 Backplate 4" - 2. 5. 6.

177 Backplate 5" - 2. 5. 6.

178 Backplate 6" - 2. 5. 6.

179 Nose Protection Cap - 16. 0.

A-180 Four-way Toolpost 15. 9. 6.

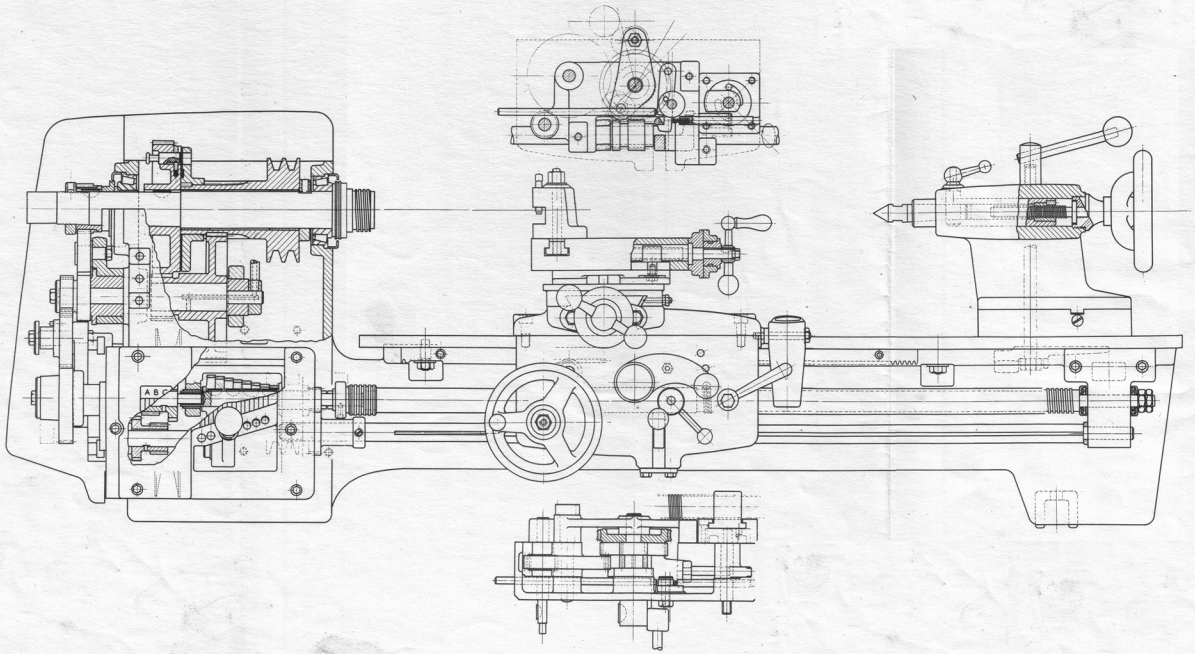
A-194 Draw in Spindle - 6. 0. 0.
Collets, round stock 1/64" to ½" by 1/64" also all M.M. sizes ea. - 1.12. 6.
Hexagon and Square sizes - 1.17. 6.

A-241 Boring Table 5"x 7" - 7.15.6.

A-242 Vertical Slide with Vice - 19. 2.0.

A-421 Taper Turning Attachment - 18.12.6.

Extra for fitting Chucks to Backplate - 1.12.6.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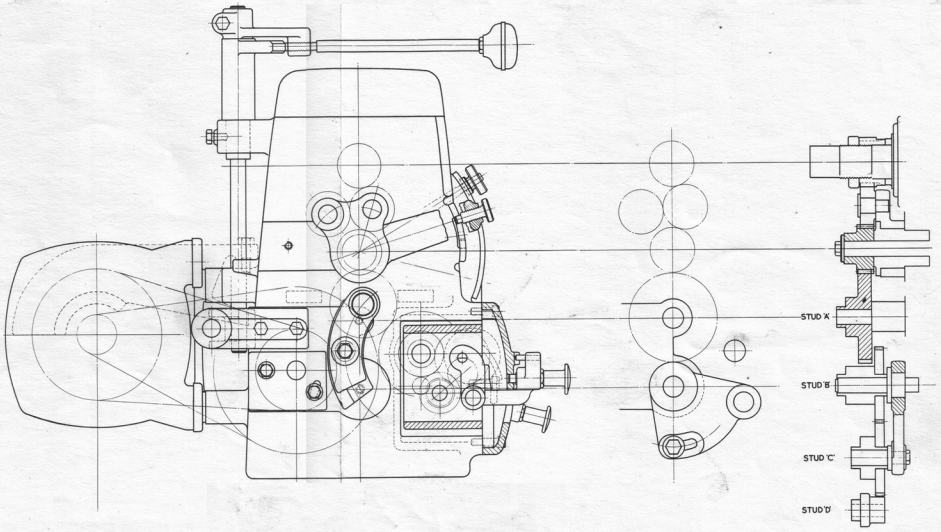
STUD 'A'
STUD 'B'
STUD 'C'
STUD 'D'