Z M

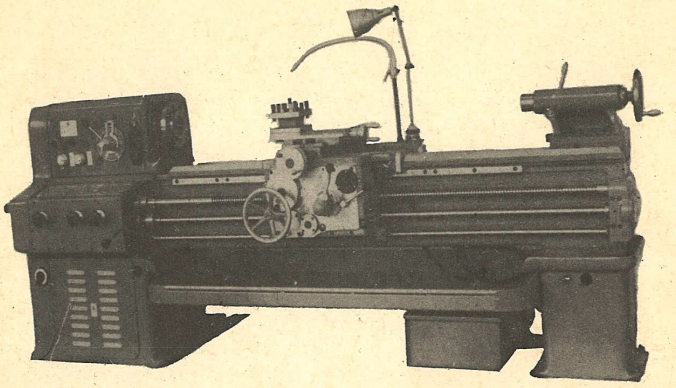
MACHSTROI

TROIAN

C11M

C11B

TOUR UNIVERSEL

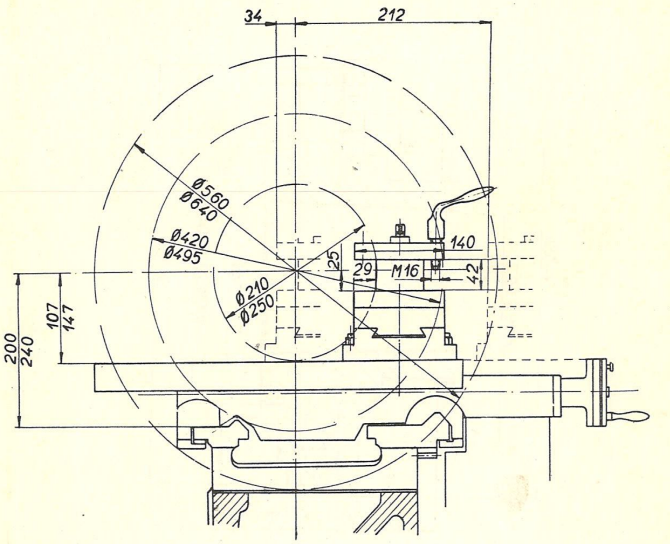


MANUEL D'EMPLOI ET D'ENTRETIEN

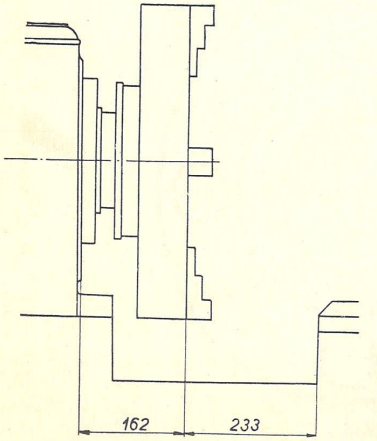
Tours universels

C11M · C11B

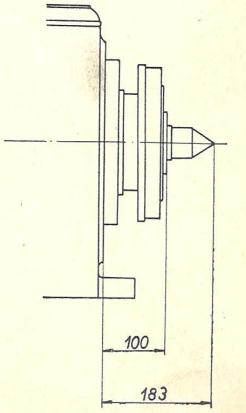
ZMM MACHSTROI
TROIAN



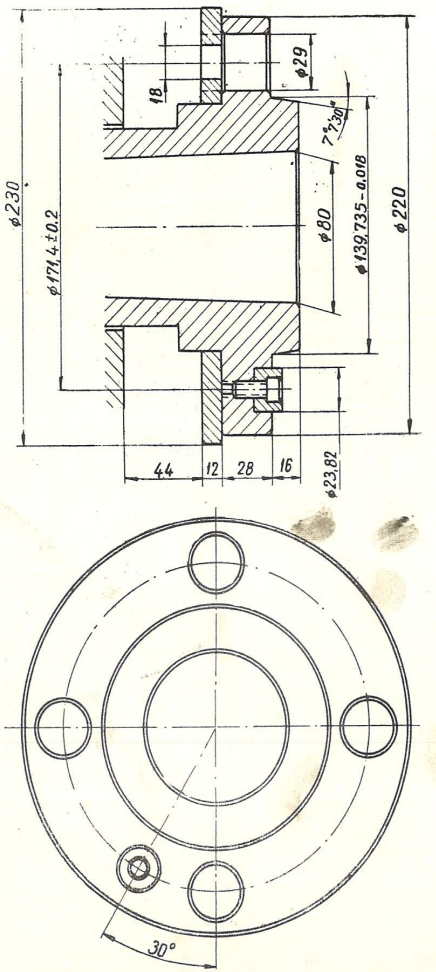
Фиг. 1 Fig.



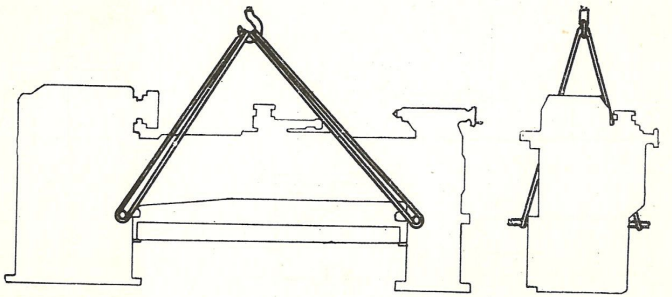
Фиг. 2 Fig.

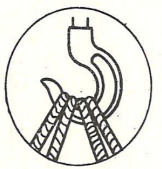


Фиг. 3 Fig.

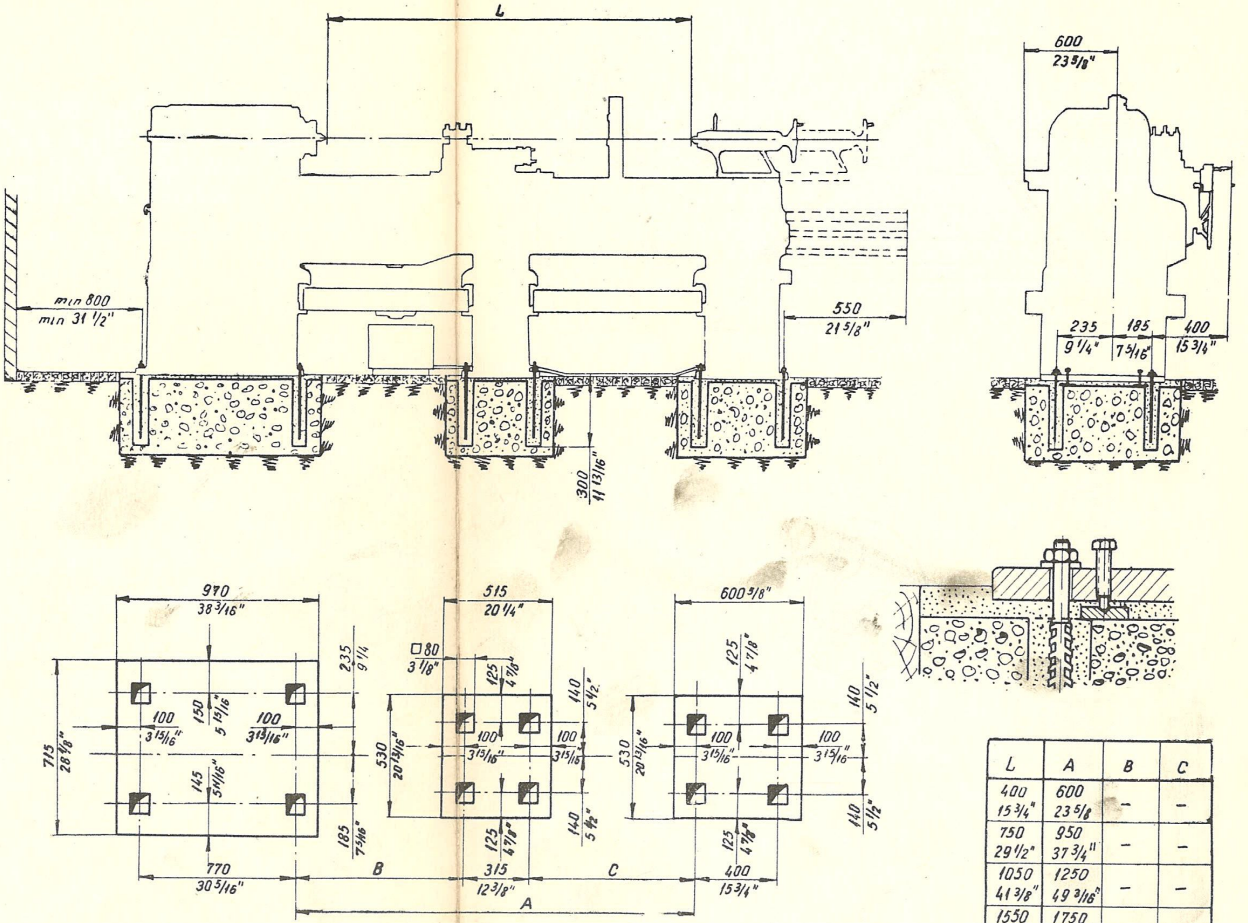

ϕ230
ϕ171.4±0.2
18
ϕ29
7°30'
ϕ80
ϕ139.735-0.018
ϕ220
44
12
28
16
ϕ23.82
30°

Фиг. 4 Fig.



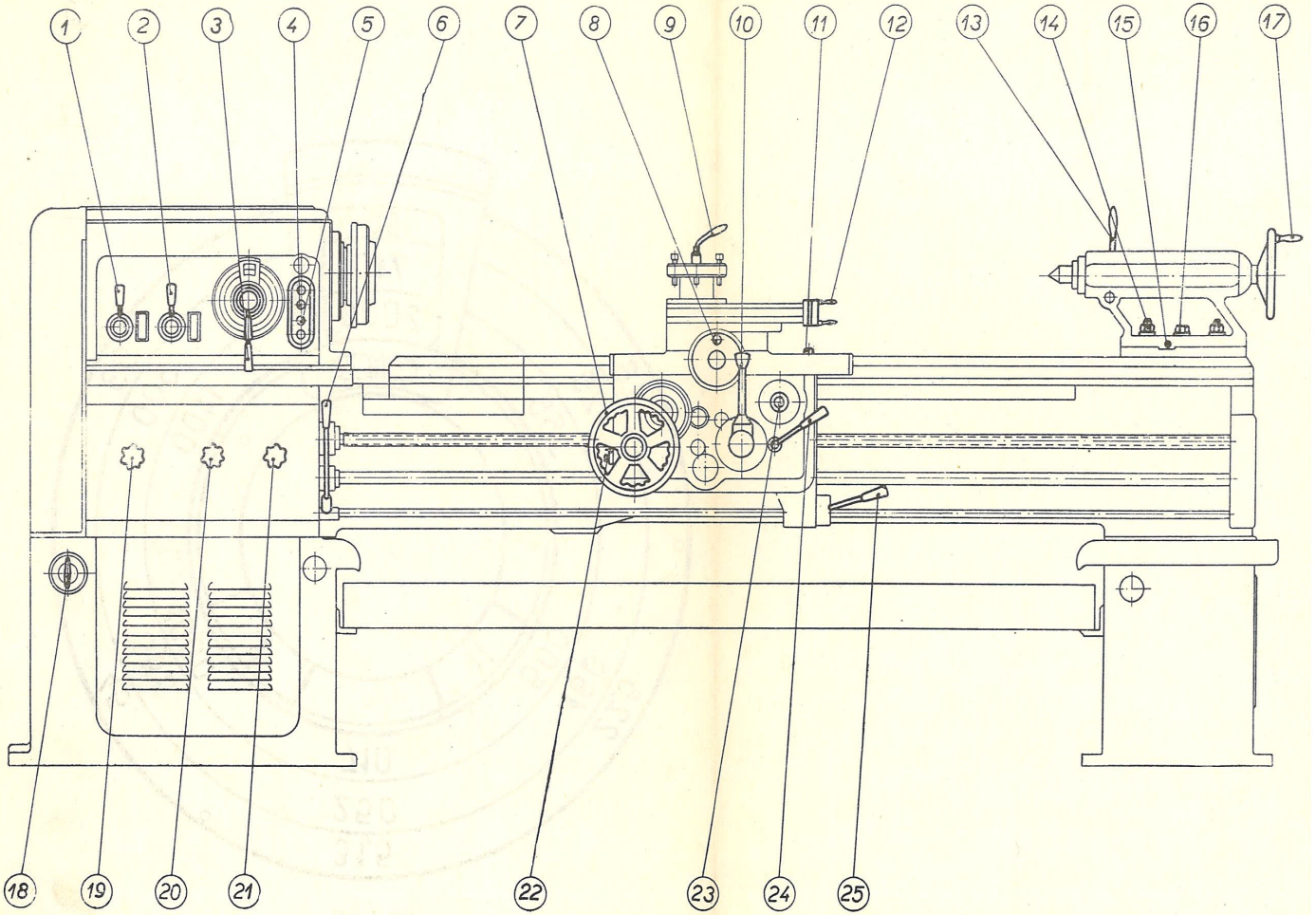


Фиг. 5 Fig.

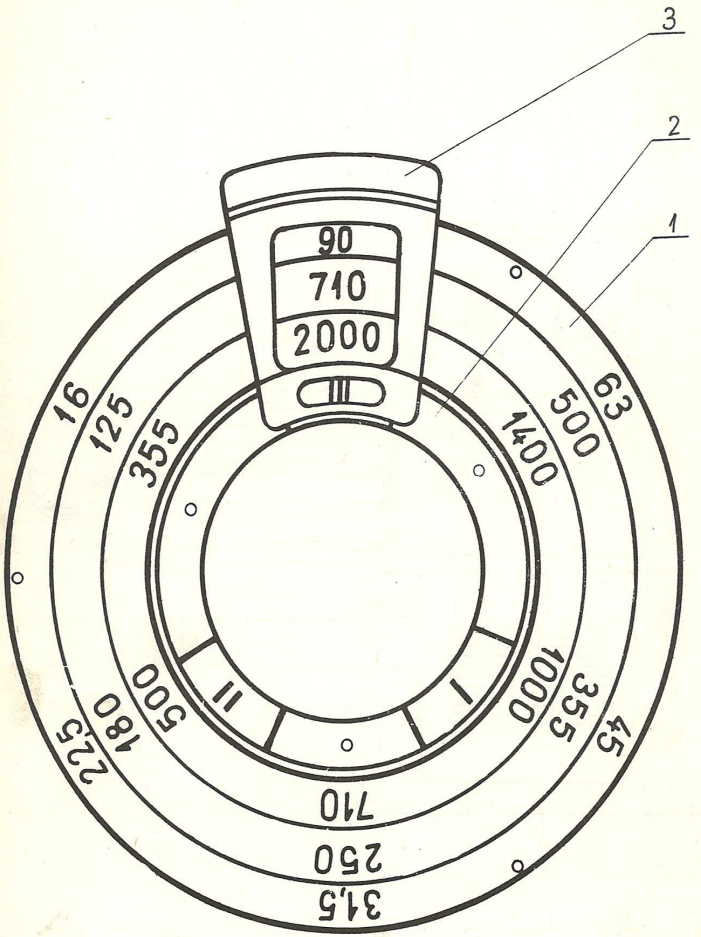


Фиг. 6 Fig.

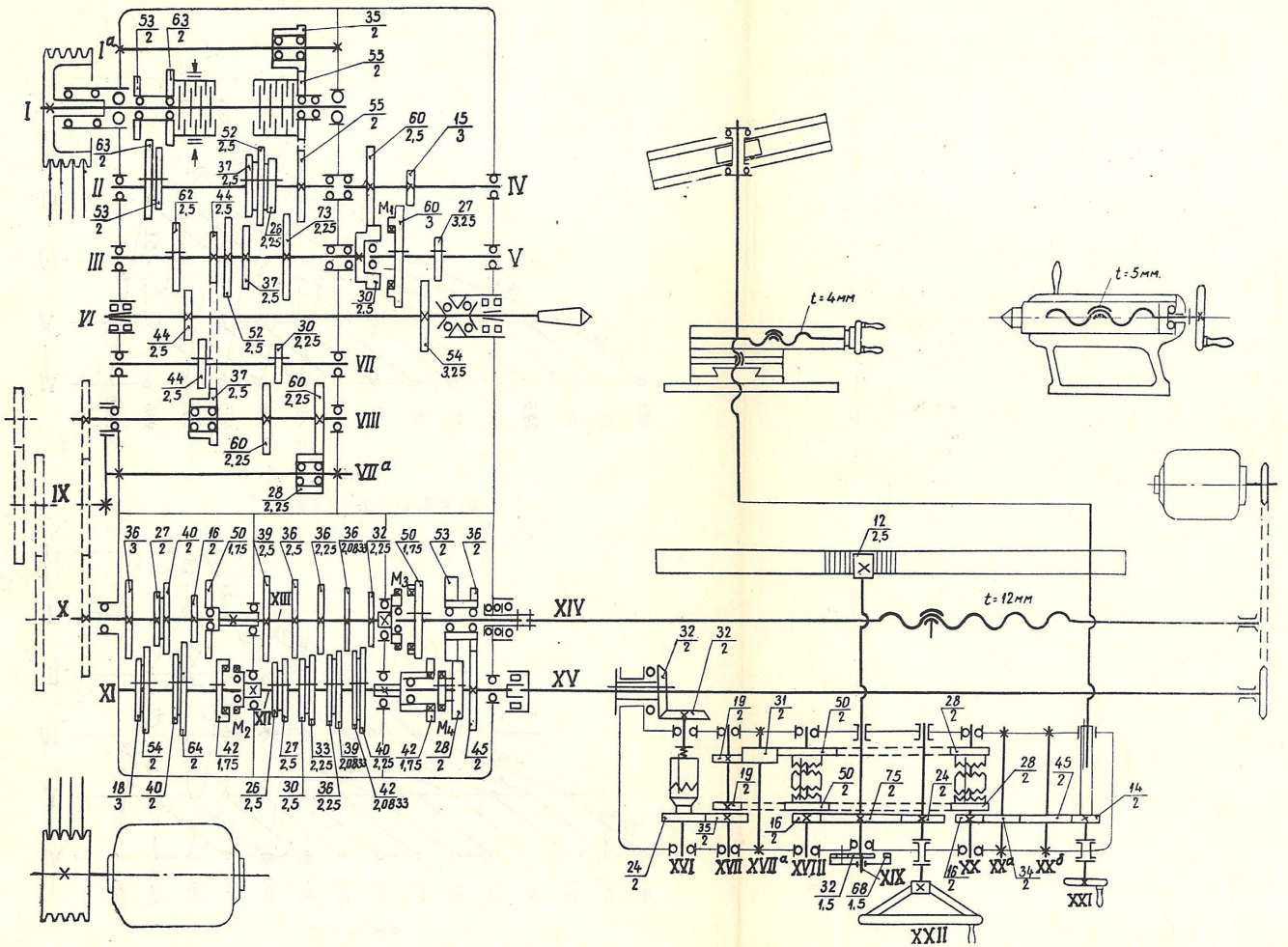
L	A	B	C
400 15 3/4"	600 23 5/8	–	–
750 29 1/2"	950 37 3/4"	–	–
1050 41 3/8"	1250 49 3/16"	–	–
1550 61"	1750 68 7/8"	–	–
2000 78 3/4"	2250 88 3/16"	962 37 7/8"	973 38 5/16"



Фиг. 7 Fig.

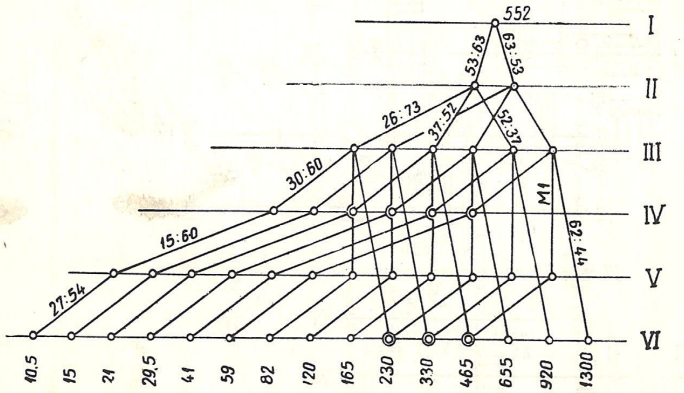

3
2
1
90
710
2000
16
125
355
1400
500
63
180
500
1000
355
45
225
710
250
31,5

Фиг. 8 Fig.

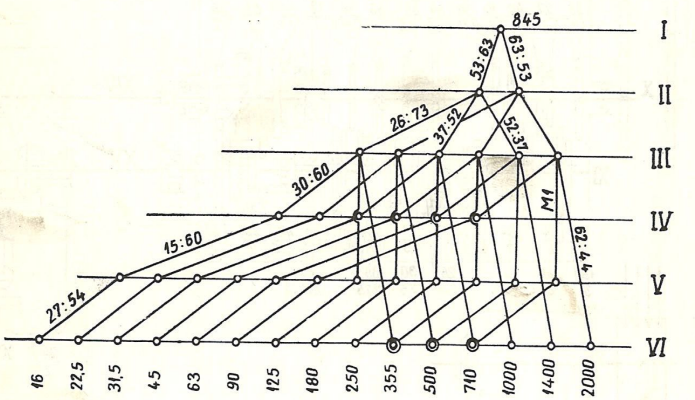

I
I^a
II
III
IV
V
VI
VII
VIII
VII^a
IX
X
XI
XIII
XIV
XV
XVI
XVII
XVII^a
XVIII
XIX
XX
XX^a
XX^б
XXI
XXII
M1
M2
M3
M4
t=4мм
t=5мм.
t=12мм

Фиг. 9 Fig.

N = 4 кw.



N=5,5кw ; N=7,5 кw



Фиг. 10 Fig.

⟳/min		16 ÷ 2000				II 125 ÷ 710				I 16 ÷ 90			
		1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1
m	1	0,125	0,25	0,5	1	0,25	0,5	1	2	2	4	8	16
	2	0,141	0,281	0,562	1,125	0,281	0,562	1,125	2,25	2,25	4,5	9	18
	3	0,156	0,312	0,625	1,25	0,312	0,625	1,25	2,5	2,5	5	10	20
	4	0,172	0,344	0,687	1,375	0,344	0,687	1,375	2,75	2,75	5,5	11	22
	5	0,187	0,375	0,75	1,5	0,375	0,75	1,5	3	3	6	12	24
	6	0,203	0,406	0,812	1,625	0,406	0,812	1,625	3,25	3,25	6,5	13	26
	7	0,219	0,437	0,875	1,75	0,437	0,875	1,75	3,5	3,5	7	14	28
	8	0,234	0,469	0,937	1,875	0,469	0,937	1,875	3,75	3,75	7,5	15	30
DP	1	128	64	32	16	64	32	16	8	8	4	2	1
	2	144	72	36	18	72	36	18	9	9	4 1/2	2 1/4	1 1/8
	3	160	80	40	20	80	40	20	10	10	5	2 1/2	1 1/4
	4	176	88	44	22	88	44	22	11	11	5 1/2	2 3/4	1 3/8
	5	192	96	48	24	96	48	24	12	12	6	3	1 1/2
	6	208	104	52	26	104	52	26	13	13	6 1/2	3 1/4	1 5/8
	7	224	112	56	28	112	56	28	14	14	7	3 1/2	1 3/4
	8	240	120	60	30	120	60	30	15	15	7 1/2	3 3/4	1 7/8

⟳/min		16 ÷ 2000				II 125 ÷ 710				I 16 ÷ 90			
		1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1
mm	1	0,5	1	2	4	1	2	4	8	8	16	32	64
	2	0,562	1,125	2,25	4,5	1,125	2,25	4,5	9	9	18	36	72
	3	0,625	1,25	2,5	5	1,25	2,5	5	10	10	20	40	80
	4	0,687	1,375	2,75	5,5	1,375	2,75	5,5	11	11	22	44	88
	5	0,75	1,5	3	6	1,5	3	6	12	12	24	48	96
	6	0,812	1,625	3,25	6,5	1,625	3,25	6,5	13	13	26	52	104
	7	0,875	1,75	3,5	7	1,75	3,5	7	14	14	28	56	112
	8	0,937	1,875	3,75	7,5	1,875	3,75	7,5	15	15	30	60	120
1"	1	32	16	8	4	16	8	4	2	2	1	1/2	1/4
	2	36	18	9	4 1/2	18	9	4 1/2	2 1/4	2 1/4	1 1/8	9/16	9/32
	3	40	20	10	5	20	10	5	2 1/2	2 1/2	1 1/4	5/8	5/16
	4	44	22	11	5 1/2	22	11	5 1/2	2 3/4	2 3/4	1 3/8	11/16	11/32
	5	48	24	12	6	24	12	6	3	3	1 1/2	3/4	3/8
	6	52	26	13	6 1/2	26	13	6 1/2	3 1/4	3 1/4	1 5/8	13/16	13/32
	7	56	28	14	7	28	14	7	3 1/2	3 1/2	1 3/4	7/8	7/16
	8	60	30	15	7 1/2	30	15	7 1/2	3 3/4	3 3/4	1 7/8	15/16	15/32

⟳/ min		16 ÷ 2000				II 125 ÷ 710				I 16 ÷ 90				III 355 ÷ 2000			
		1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1
	1	0,17	0,35	0,70	1,39	0,35	0,70	1,39	2,79	2,79	5,58	11,16	22,32	0,12	0,25	0,50	0,99
	2	0,16	0,31	0,62	1,24	0,31	0,62	1,24	2,48	2,48	4,96	9,92	19,84	0,11	0,22	0,44	0,88
	3	0,14	0,28	0,56	1,12	0,28	0,56	1,12	2,23	2,23	4,46	8,93	17,86	0,10	0,20	0,40	0,79
	4	0,13	0,25	0,51	1,01	0,25	0,51	1,01	2,03	2,03	4,06	8,12	16,23	0,09	0,18	0,36	0,72
	5	0,12	0,23	0,46	0,93	0,23	0,46	0,93	1,86	1,86	3,72	7,44	14,88	0,08	0,17	0,34	0,68
	6	0,11	0,21	0,43	0,86	0,21	0,43	0,86	1,72	1,72	3,43	6,87	13,73	0,08	0,15	0,30	0,61
	7	0,10	0,20	0,40	0,80	0,20	0,40	0,80	1,59	1,59	3,19	6,38	12,75	0,07	0,14	0,28	0,57
	8	0,09	0,19	0,37	0,74	0,19	0,37	0,74	1,49	1,49	2,98	5,95	11,90	0,07	0,13	0,26	0,53
	1	0,09	0,17	0,35	0,70	0,17	0,35	0,70	1,39	1,39	2,79	5,58	11,16	0,06	0,12	0,25	0,50
	2	0,08	0,16	0,31	0,62	0,16	0,31	0,62	1,24	1,24	2,48	4,96	9,92	0,05	0,11	0,22	0,44
	3	0,07	0,14	0,28	0,56	0,14	0,28	0,56	1,12	1,12	2,23	4,46	8,93	0,05	0,10	0,20	0,40
	4	0,06	0,13	0,25	0,51	0,13	0,25	0,51	1,01	1,01	2,03	4,06	8,12	0,04	0,09	0,18	0,36
	5	0,06	0,12	0,23	0,46	0,12	0,23	0,46	0,93	0,93	1,86	3,72	7,44	0,04	0,08	0,17	0,34
	6	0,05	0,11	0,21	0,43	0,11	0,21	0,43	0,86	0,86	1,72	3,43	6,87	0,04	0,08	0,15	0,30
	7	0,05	0,10	0,20	0,40	0,10	0,20	0,40	0,80	0,80	1,59	3,19	6,38	0,03	0,07	0,14	0,28
	8	0,05	0,09	0,19	0,37	0,09	0,19	0,37	0,74	0,74	1,49	2,98	5,95	0,03	0,07	0,13	0,26

Фиг. 11 Fig.

Q/min		16 ÷ 2000				II 125 ÷ 710				I 16 ÷ 90			
		1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1
m	1	0.125	0.25	0.5	1	0.25	0.5	1	2	2	4	8	16
	2	0.141	0.281	0.562	1.125	0.281	0.562	1.125	2.25	2.25	4.5	9	18
	3	0.156	0.312	0.625	1.25	0.312	0.625	1.25	2.5	2.5	5	10	20
	4	0.172	0.344	0.687	1.375	0.344	0.687	1.375	2.75	2.75	5.5	11	22
	5	0.187	0.375	0.75	1.5	0.375	0.75	1.5	3	3	6	12	24
	6	0.203	0.406	0.812	1.625	0.406	0.812	1.625	3.25	3.25	6.5	13	26
	7	0.219	0.437	0.875	1.75	0.437	0.875	1.75	3.5	3.5	7	14	28
	8	0.234	0.469	0.937	1.875	0.469	0.937	1.875	3.75	3.75	7.5	15	30
DP	1	128	64	32	16	64	32	16	8	8	4	2	1
	2	144	72	36	18	72	36	18	9	9	4 1/2	2 1/4	1 1/8
	3	160	80	40	20	80	40	20	10	10	5	2 1/2	1 1/4
	4	176	88	44	22	88	44	22	11	11	5 1/2	2 3/4	1 3/8
	5	192	96	48	24	96	48	24	12	12	6	3	1 1/2
	6	208	104	52	26	104	52	26	13	13	6 1/2	3 1/4	1 5/8
	7	224	112	56	28	112	56	28	14	14	7	3 1/2	1 3/4
	8	240	120	60	30	120	60	30	15	15	7 1/2	3 3/4	1 7/8

Q/min		16 ÷ 2000				II 125 ÷ 710				I 16 ÷ 90			
		1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1
mm	1	0.5	1	2	4	1	2	4	8	8	16	32	64
	2	0.562	1.125	2.25	4.5	1.125	2.25	4.5	9	9	18	36	72
	3	0.625	1.25	2.5	5	1.25	2.5	5	10	10	20	40	80
	4	0.687	1.375	2.75	5.5	1.375	2.75	5.5	11	11	22	44	88
	5	0.75	1.5	3	6	1.5	3	6	12	12	24	48	96
	6	0.812	1.625	3.25	6.5	1.625	3.25	6.5	13	13	26	52	104
	7	0.875	1.75	3.5	7	1.75	3.5	7	14	14	28	56	112
	8	0.937	1.875	3.75	7.5	1.875	3.75	7.5	15	15	30	60	120
1"	1	32	16	8	4	16	8	4	2	2	1	1/2	1/4
	2	36	18	9	4 1/2	18	9	4 1/2	2 1/4	2 1/4	1 1/8	9/16	9/32
	3	40	20	10	5	20	10	5	2 1/2	2 1/2	1 1/4	5/8	5/16
	4	44	22	11	5 1/2	22	11	5 1/2	2 3/4	2 3/4	1 3/8	11/16	11/32
	5	48	24	12	6	24	12	6	3	3	1 1/2	3/4	3/8
	6	52	26	13	6 1/2	26	13	6 1/2	3 1/4	3 1/4	1 5/8	13/16	13/32
	7	56	28	14	7	28	14	7	3 1/2	3 1/2	1 3/4	7/8	7/16
	8	60	30	15	7 1/2	30	15	7 1/2	3 3/4	3 3/4	1 7/8	15/16	15/32

Q/ min		16 ÷ 2000				II 125 ÷ 710				I 16 ÷ 90				III 355 ÷ 2000			
		1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1
	1	.0065	.0131	.0262	.0523	.0131	.0262	.0523	.1046	.1046	.2094	.4188	.8375	.0041	.0082	.0165	.0330
	2	.0058	.0116	.0233	.0466	.0116	.0233	.0466	.0931	.0931	.1862	.3725	.7450	.0036	.0073	.0146	.0292
	3	.0053	.0105	.0209	.0419	.0105	.0209	.0419	.0838	.0838	.1675	.3350	.6701	.0033	.0065	.0131	.0262
	4	.0048	.0095	.0190	.0381	.0095	.0190	.0381	.0762	.0762	.1523	.3046	.6093	.0030	.0060	.0120	.0239
	5	.0044	.0087	.0175	.0350	.0087	.0175	.0350	.0699	.0699	.1398	.2797	.5594	.0027	.0055	.0110	.0220
	6	.0040	.0081	.0161	.0322	.0081	.0161	.0322	.0645	.0645	.1290	.2579	.5158	.0025	.0051	.0101	.0202
	7	.0037	.0075	.0150	.0299	.0075	.0150	.0299	.0598	.0598	.1197	.2394	.4787	.0023	.0047	.0094	.0188
	8	.0035	.0070	.0140	.0280	.0070	.0140	.0280	.0560	.0560	.1120	.2240	.4480	.0022	.0044	.0088	.0175
	1	.0033	.0065	.0131	.0262	.0065	.0131	.0262	.0523	.0523	.1046	.2094	.4188	.0021	.0041	.0082	.0165
	2	.0029	.0058	.0116	.0233	.0058	.0116	.0233	.0466	.0466	.0931	.1862	.3725	.0018	.0036	.0073	.0146
	3	.0026	.0053	.0105	.0209	.0053	.0105	.0209	.0419	.0419	.0838	.1675	.3350	.0016	.0033	.0065	.0131
	4	.0024	.0048	.0095	.0190	.0048	.0095	.0190	.0381	.0381	.0762	.1523	.3046	.0015	.0030	.0060	.0120
	5	.0022	.0044	.0087	.0175	.0044	.0087	.0175	.0350	.0350	.0699	.1398	.2797	.0014	.0027	.0055	.0110
	6	.0020	.0040	.0081	.0161	.0040	.0081	.0161	.0322	.0322	.0645	.1290	.2579	.0013	.0025	.0051	.0101
	7	.0019	.0037	.0075	.0150	.0037	.0075	.0150	.0299	.0299	.0598	.1197	.2394	.0012	.0023	.0047	.0094
	8	.0017	.0035	.0070	.0140	.0035	.0070	.0140	.0280	.0280	.0560	.1120	.2240	.0011	.0022	.0044	.0088

Фиг. 12 Fig.

⟳/min		16 ÷ 2000				II 125 ÷ 710				I 16 ÷ 90			
		1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1
mm	1	0.125	0.25	0.5	1	0.25	0.5	1	2	2	4	8	16
	2	0.141	0.281	0.562	1.125	0.281	0.562	1.125	2.25	2.25	4.5	9	18
	3	0.156	0.312	0.625	1.25	0.312	0.625	1.25	2.5	2.5	5	10	20
	4	0.172	0.344	0.687	1.375	0.344	0.687	1.375	2.75	2.75	5.5	11	22
	5	0.187	0.375	0.75	1.5	0.375	0.75	1.5	3	3	6	12	24
	6	0.203	0.406	0.812	1.625	0.406	0.812	1.625	3.25	3.25	6.5	13	26
	7	0.219	0.437	0.875	1.75	0.437	0.875	1.75	3.5	3.5	7	14	28
	8	0.234	0.469	0.937	1.875	0.469	0.937	1.875	3.75	3.75	7.5	15	30
DP	1	128	64	32	16	64	32	16	8	8	4	2	1
	2	144	72	36	18	72	36	18	9	9	4 1/2	2 1/4	1 1/8
	3	160	80	40	20	80	40	20	10	10	5	2 1/2	1 1/4
	4	176	88	44	22	88	44	22	11	11	5 1/2	2 3/4	1 3/8
	5	192	96	48	24	96	48	24	12	12	6	3	1 1/2
	6	208	104	52	26	104	52	26	13	12	6 1/2	3 1/4	1 3/8
	7	224	112	56	28	112	56	28	14	14	7	3 1/2	1 3/4
	8	240	120	60	30	120	60	30	15	15	7 1/2	3 3/4	1 7/8

⟳/min		16 ÷ 2000				II 125 ÷ 710				I 16 ÷ 90			
		1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1
mm	1	0.5	1	2	4	1	2	4	8	8	16	32	64
	2	0.562	1.125	2.25	4.5	1.125	2.25	4.5	9	9	18	36	72
	3	0.625	1.25	2.5	5	1.25	2.5	5	10	10	20	40	80
	4	0.687	1.375	2.75	5.5	1.375	2.75	5.5	11	11	22	44	88
	5	0.75	1.5	3	6	1.5	3	6	12	12	24	48	96
	6	0.812	1.625	3.25	6.5	1.625	3.25	6.5	13	13	26	52	104
	7	0.875	1.75	3.5	7	1.75	3.5	7	14	14	28	56	112
	8	0.937	1.875	3.75	7.5	1.875	3.75	7.5	15	15	30	60	120
1/"	1	32	16	8	4	16	8	4	2	2	1	1/2	1/4
	2	36	18	9	4 1/2	18	9	4 1/2	2 1/4	2 1/4	1 1/8	9/16	9/32
	3	40	20	10	5	20	10	5	2 1/2	2 1/2	1 1/4	5/8	5/16
	4	44	22	11	5 1/2	22	11	5 1/2	2 3/4	2 3/4	1 3/8	11/16	11/32
	5	48	24	12	6	24	12	6	3	3	1 1/2	3/4	3/8
	6	52	26	13	6 1/2	26	13	6 1/2	3 1/4	3 1/4	1 5/8	13/16	13/32
	7	56	28	14	7	28	14	7	3 1/2	3 1/2	1 3/4	7/8	7/16
	8	60	30	15	7 1/2	30	15	7 1/2	3 3/4	3 3/4	1 7/8	15/16	15/32

⟳/ min		16 ÷ 2000				II 125 ÷ 710				I 16 ÷ 90				III 355 ÷ 2000			
		1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1
	1	0.17	0.35	0.70	1.39	0.35	0.70	1.39	2.79	2.79	5.58	11,16	22,32	0.12	0,25	0.50	0.99
	2	0.16	0.31	0.62	1.24	0.31	0.62	1.24	2.48	2.48	4.96	9,92	19,84	0.11	0.22	0.44	0.88
	3	0.14	0.28	0.56	1.12	0.28	0.56	1.12	2.23	2.23	4.46	8.93	17.86	0.10	0,20	0.40	0.79
	4	0,13	0,25	0.51	1.01	0.25	0,51	1.01	2.03	2.03	4.06	8.12	16,23	0.09	0.18	0.36	0.72
	5	0.12	0.23	0.46	0.93	0.23	0.46	0.93	1.86	1.86	3.72	7.44	14.88	0.08	0.17	0.34	0.68
	6	0.11	0.21	0.43	0.86	0.21	0.43	0.86	1.72	1.72	3.43	6,87	13,73	0.08	0.15	0.30	0.61
	7	0.10	0.20	0.40	0.80	0.20	0.40	0.80	1.59	1.59	3.19	6.38	12,75	0.07	0.14	0.28	0.57
	8	0.09	0.19	0.37	0.74	0.19	0.37	0.74	1.49	1.49	2.98	5.95	11.90	0.07	0.13	0.26	0.53
	1	0.09	0.17	0.35	0.70	0.17	0.35	0.70	1.39	1.39	2.79	5.58	11,16	0.06	0.12	0.25	0.50
	2	0.08	0.16	0.31	0.62	0.16	0.31	0.62	1.24	1.24	2.48	4.96	9,92	0.05	0.11	0.22	0.44
	3	0.07	0.14	0.28	0.56	0.14	0.28	0.56	1.12	1.12	2.23	4.46	8.93	0.05	0.10	0.20	0.40
	4	0.06	0,13	0.25	0.51	0.13	0.25	0.51	1.01	1.01	2.03	4.06	8.12	0.04	0.09	0.18	0.36
	5	0.06	0.12	0.23	0.46	0.12	0.23	0.46	0.93	0.93	1.86	3.72	7.44	0.04	0.08	0.17	0.34
	6	0.05	0.11	0.21	0.43	0.11	0.21	0.43	0.86	0.86	1.72	3.43	6.87	0.04	0.08	0.15	0.30
	7	0.05	0.10	0.20	0.40	0.10	0.20	0.40	0.80	0.80	1.59	3.19	6.38	0.03	0.07	0.14	0.28
	8	0.05	0.09	0.19	0.37	0.09	0.19	0.37	0.74	0.74	1.49	2,98	5,95	0.03	0.07	0.13	0.26

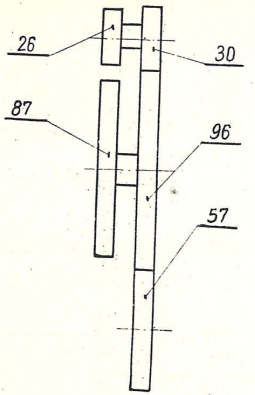
Фиг. 13 Fig.

Q/min		16 ÷ 2000				II 125 ÷ 710				I 16 ÷ 90				
		1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1	
50 68 119 197	m	1	0.125	0.25	0.5	1	0.25	0.5	1	2	2	4	8	16
		2	0.141	0.281	0.562	1.125	0.281	0.562	1.125	2.25	2.25	4.5	9	18
		3	0.156	0.312	0.625	1.25	0.312	0.625	1.25	2.5	2.5	5	10	20
		4	0.172	0.344	0.687	1.375	0.344	0.687	1.375	2.75	2.75	5.5	11	22
		5	0.187	0.375	0.75	1.5	0.375	0.75	1.5	3	3	6	12	24
		6	0.203	0.406	0.812	1.625	0.406	0.812	1.625	3.25	3.25	6.5	13	26
		7	0.219	0.437	0.875	1.75	0.437	0.875	1.75	3.5	3.5	7	14	28
		8	0.234	0.469	0.937	1.875	0.469	0.937	1.875	3.75	3.75	7.5	15	30
	DP	1	128	64	32	16	64	32	16	8	8	4	2	1
		2	144	72	36	18	72	36	18	9	9	4 1/2	2 1/4	1 1/8
		3	160	80	40	20	80	40	20	10	10	5	2 1/2	1 1/4
		4	176	88	44	22	88	44	22	11	11	5 1/2	2 3/4	1 3/8
		5	192	96	48	24	96	48	24	12	12	6	3	1 1/2
		6	208	104	52	26	104	52	26	13	13	6 1/2	3 1/4	1 5/8
		7	224	112	56	28	112	56	28	14	14	7	3 1/2	1 3/4
		8	240	120	60	30	120	60	30	15	15	7 1/2	3 3/4	1 7/8

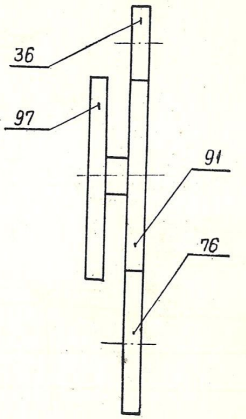
Q/min		16 ÷ 2000				II 125 ÷ 710				I 16 ÷ 90				
		1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1	
50 75 98 81	mm	1	0.5	1	2	4	1	2	4	8	8	16	32	64
		2	0.562	1.125	2.25	4.5	1.125	2.25	4.5	9	9	18	36	72
		3	0.625	1.25	2.5	5	1.25	2.5	5	10	10	20	40	80
		4	0.687	1.375	2.75	5.5	1.375	2.75	5.5	11	11	22	44	88
		5	0.75	1.5	3	6	1.5	3	6	12	12	24	48	96
		6	0.812	1.625	3.25	6.5	1.625	3.25	6.5	13	13	26	52	104
		7	0.875	1.75	3.5	7	1.75	3.5	7	14	14	28	56	112
		8	0.937	1.875	3.75	7.5	1.875	3.75	7.5	15	15	30	60	120
	1/4"	1	32	16	8	4	16	8	4	2	2	1	1/2	1/4
		2	36	18	9	4 1/2	18	9	4 1/2	2 1/4	2 1/4	1 1/8	9/16	9/32
		3	40	20	10	5	20	10	5	2 1/2	2 1/2	1 1/4	5/8	5/16
		4	44	22	11	5 1/2	22	11	5 1/2	2 3/4	2 3/4	1 3/8	11/16	11/32
		5	48	24	12	6	24	12	6	3	3	1 1/2	3/4	3/8
		6	52	26	13	6 1/2	26	13	6 1/2	3 1/4	3 1/4	1 5/8	13/16	13/32
		7	56	28	14	7	28	14	7	3 1/2	3 1/2	1 3/4	7/8	7/16
		8	60	30	15	7 1/2	30	15	7 1/2	3 3/4	3 3/4	1 7/8	15/16	15/32

Q/min		16 ÷ 2000				II 125 ÷ 710				I 16 ÷ 90				III 355 ÷ 2000					
		1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1	1/4	1/2	1/1	2/1		
50 75 98 81		1	.0065	.0131	.0262	.0523	.0131	.0262	.0523	.1046	.1046	.2094	.4188	.8375	.0041	.0082	.0165	.0330	
		2	.0058	.0116	.0233	.0466	.0116	.0233	.0466	.0931	.0931	.1862	.3725	.7450	.0036	.0073	.0146	.0292	
		3	.0053	.0105	.0209	.0419	.0105	.0209	.0419	.0838	.0838	.1675	.3350	.6701	.0033	.0065	.0131	.0262	
		4	.0048	.0095	.0190	.0381	.0095	.0190	.0381	.0762	.0762	.1523	.3046	.6093	.0030	.0060	.0120	.0239	
		5	.0044	.0087	.0175	.0350	.0087	.0175	.0350	.0699	.0699	.1398	.2797	.5594	.0027	.0055	.0110	.0220	
		6	.0040	.0081	.0161	.0322	.0081	.0161	.0322	.0645	.0645	.1290	.2579	.5158	.0025	.0051	.0101	.0202	
		7	.0037	.0075	.0150	.0299	.0075	.0150	.0299	.0598	.0598	.1197	.2394	.4787	.0023	.0047	.0094	.0188	
		8	.0035	.0070	.0140	.0280	.0070	.0140	.0280	.0560	.0560	.1120	.2240	.4481	.0022	.0044	.0088	.0175	
		1	.0033	.0065	.0131	.0262	.0065	.0131	.0262	.0523	.0523	.1046	.2094	.4188	.0021	.0041	.0082	.0165	
		2	.0029	.0058	.0116	.0233	.0058	.0116	.0233	.0466	.0466	.0931	.1862	.3725	.0018	.0036	.0073	.0146	
		3	.0026	.0053	.0105	.0209	.0053	.0105	.0209	.0419	.0419	.0838	.1675	.3350	.0016	.0033	.0065	.0131	
		4	.0024	.0048	.0095	.0190	.0048	.0095	.0190	.0381	.0381	.0762	.1523	.3046	.0015	.0030	.0060	.0120	
		5	.0022	.0044	.0087	.0175	.0044	.0087	.0175	.0350	.0350	.0699	.1398	.2797	.0014	.0027	.0055	.0110	
		6	.0020	.0040	.0081	.0161	.0040	.0081	.0161	.0322	.0322	.0645	.1290	.2579	.0013	.0025	.0051	.0101	
		7	.0019	.0037	.0075	.0150	.0037	.0075	.0150	.0299	.0299	.0598	.1197	.2394	.0012	.0023	.0047	.0094	
		8	.0017	.0035	.0070	.0140	.0035	.0070	.0140	.0280	.0280	.0560	.1120	.2240	.0011	.0022	.0044	.0088	

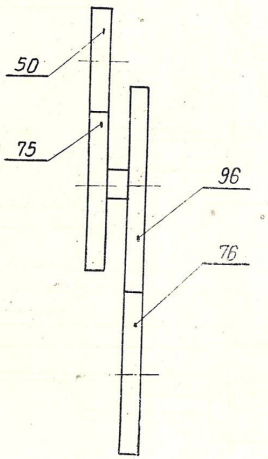
Фиг. 14 Fig.



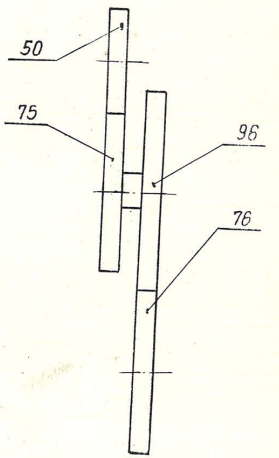
Фиг. 15 Fig.



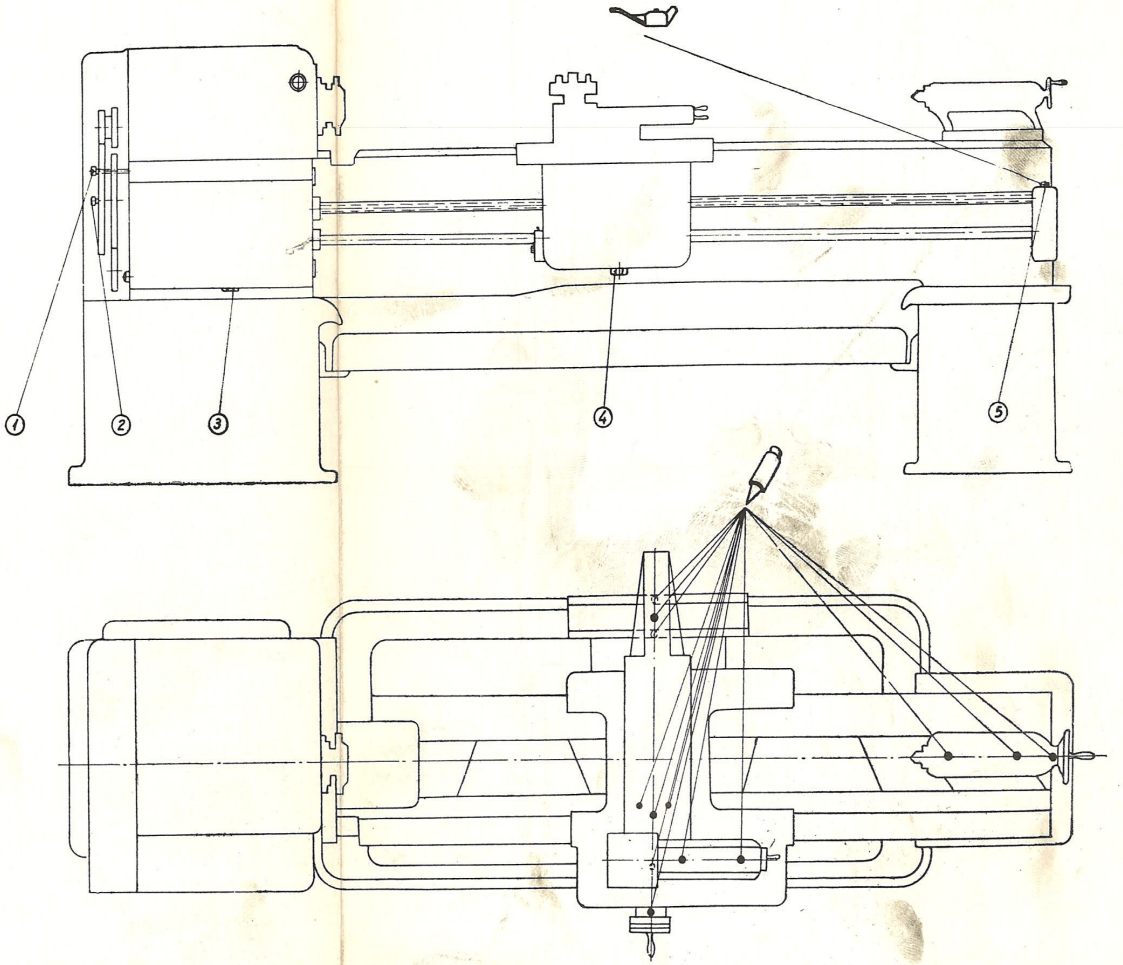
Фиг. 17 Fig.



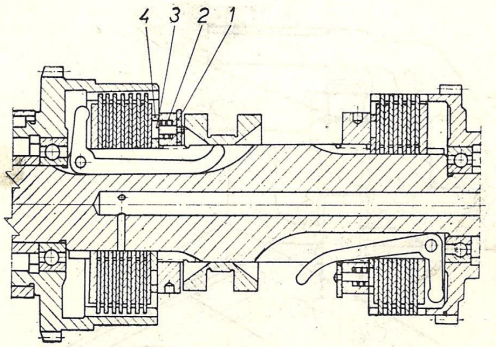
Фиг. 16 Fig.



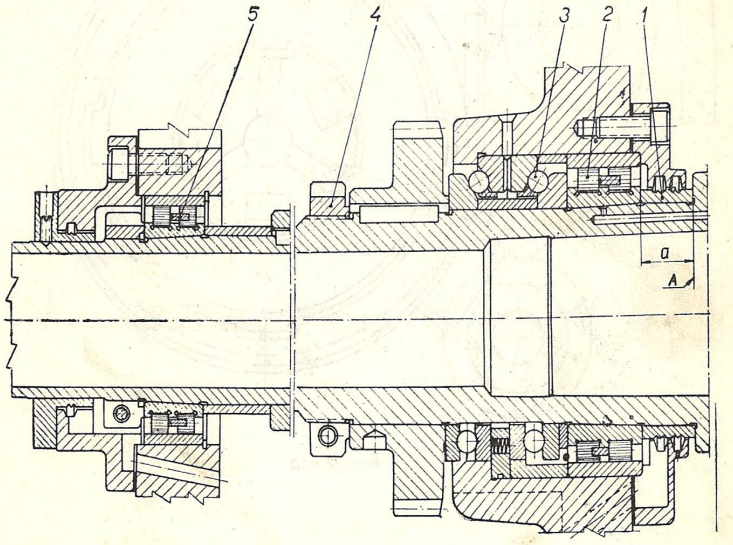
Фиг. 18 Fig.



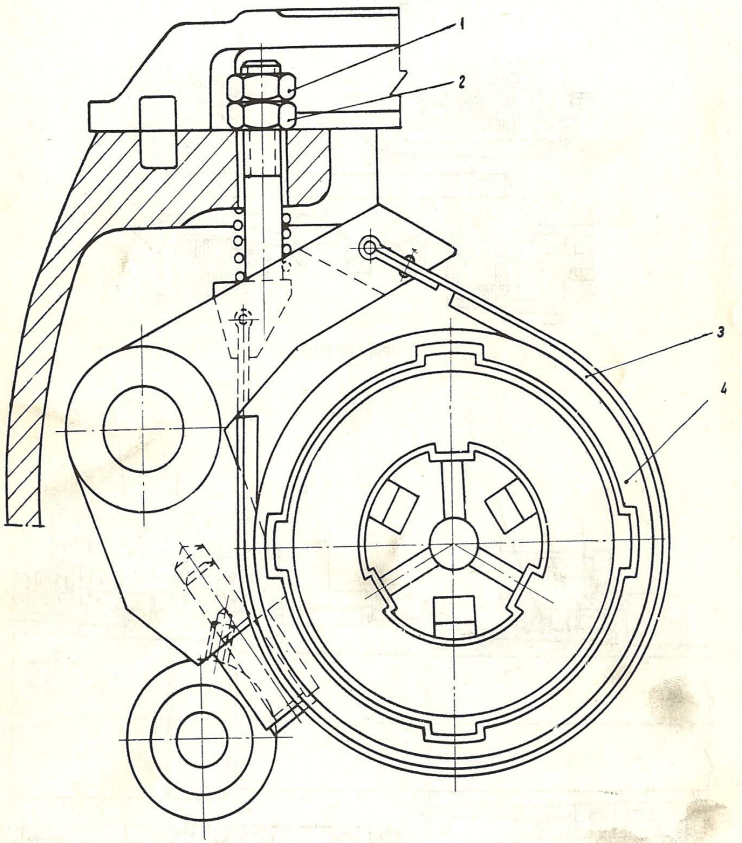
Фиг. 19 Fig



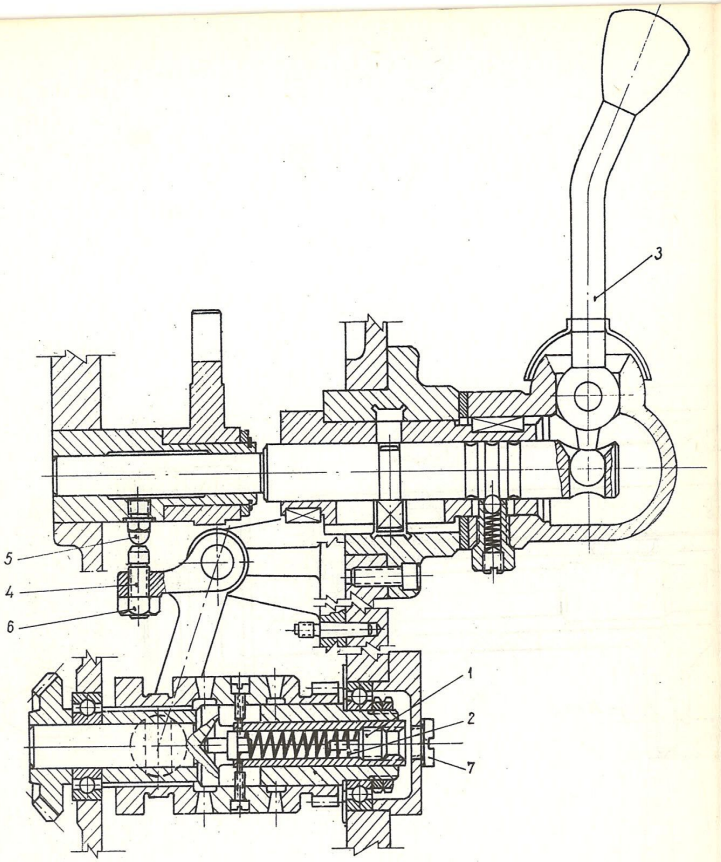
Фиг. 20 Fig.



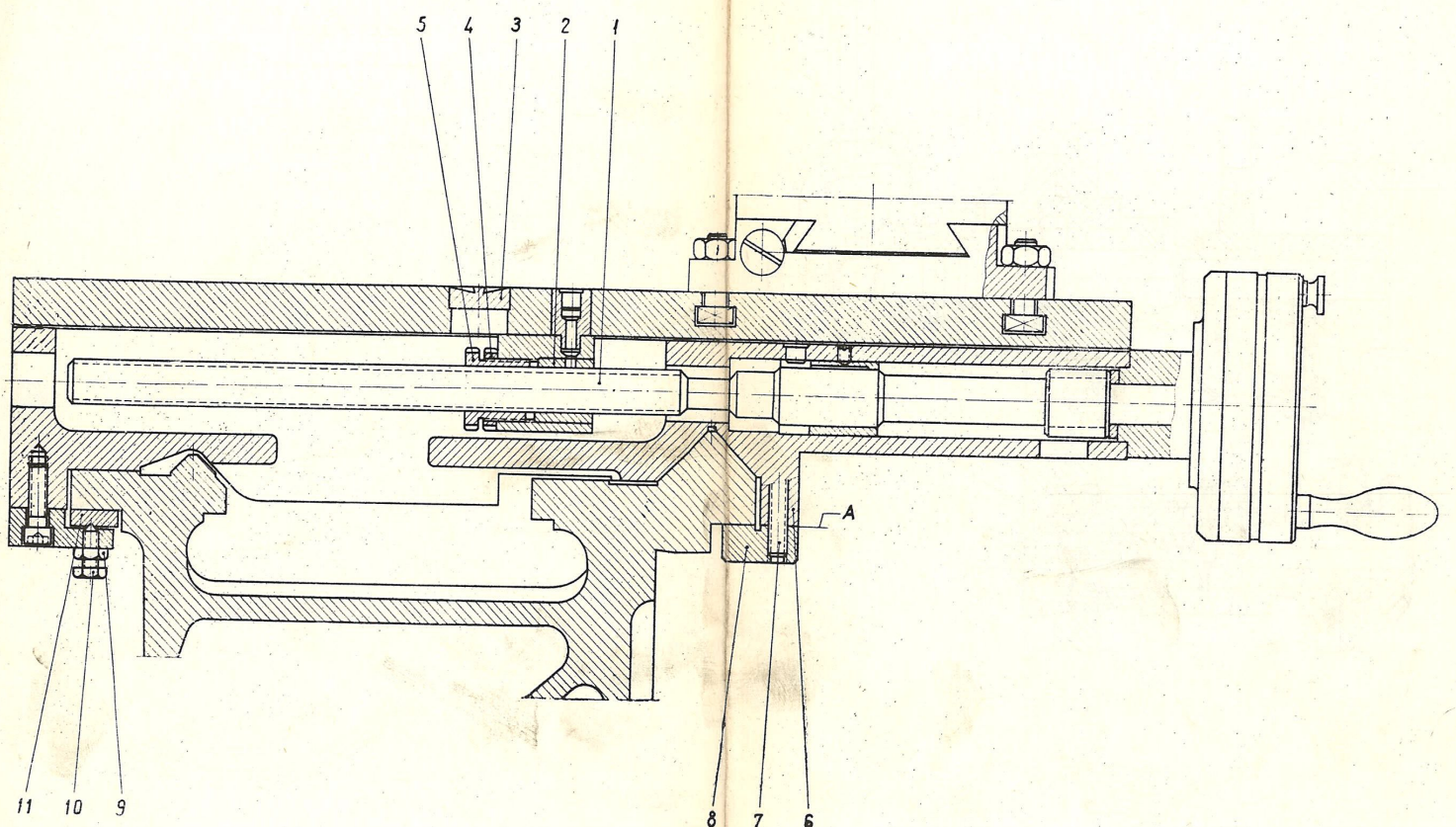
Фиг. 21 Fig.



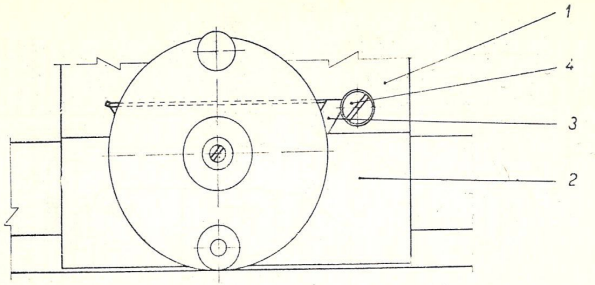
Фиг. 22 Fig.



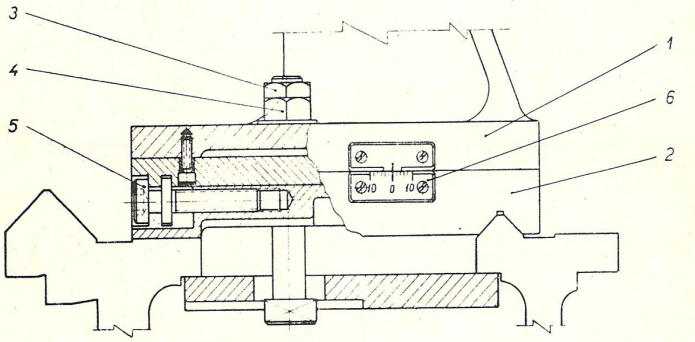
Фиг. 23 Fig.



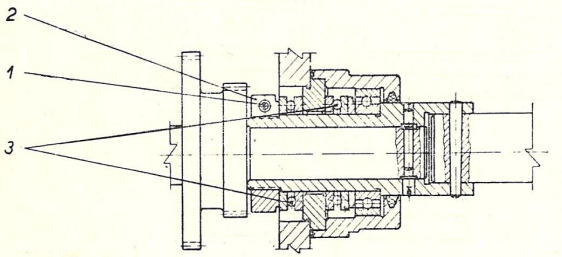
Фиг. 24 Fig.



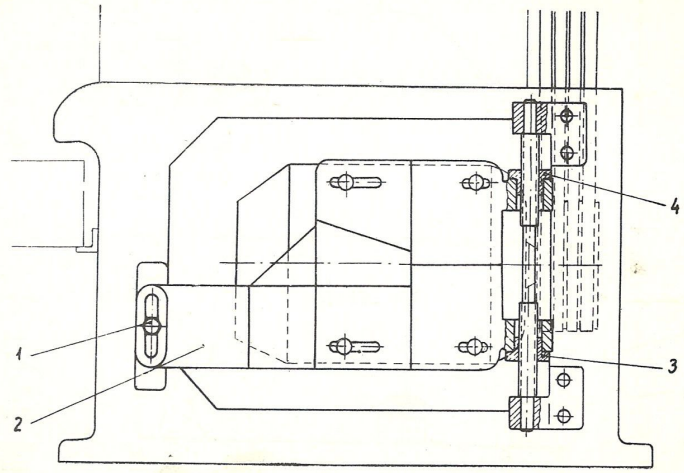
Фиг. 25 Fig.



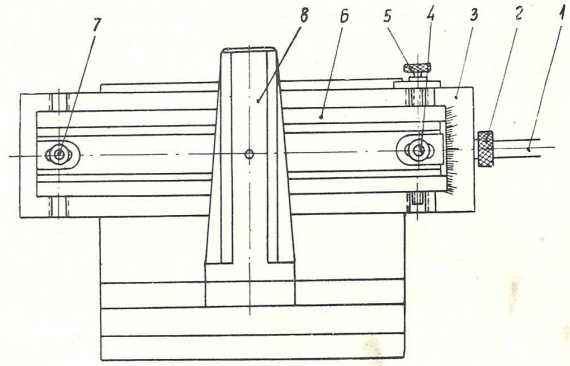
Фиг. 26 Fig.



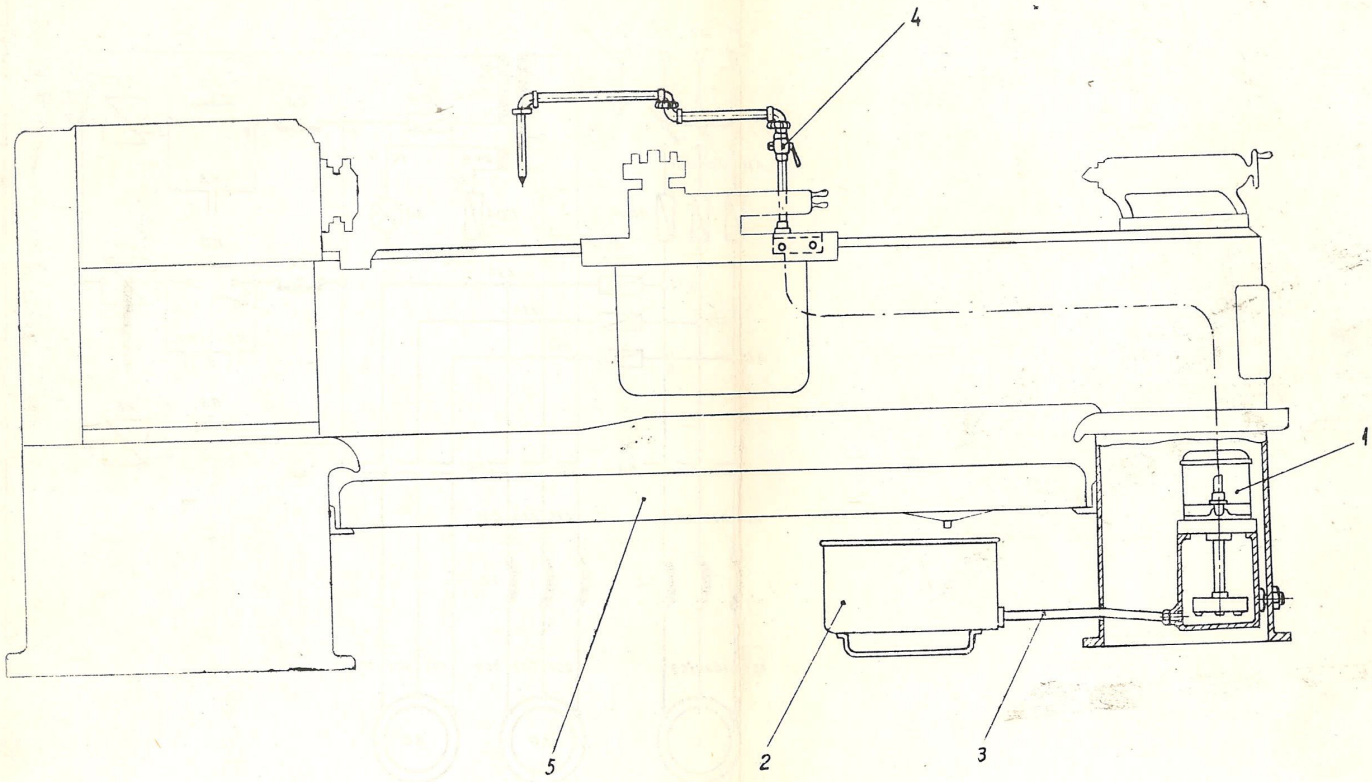
Фиг. 27 Fig.



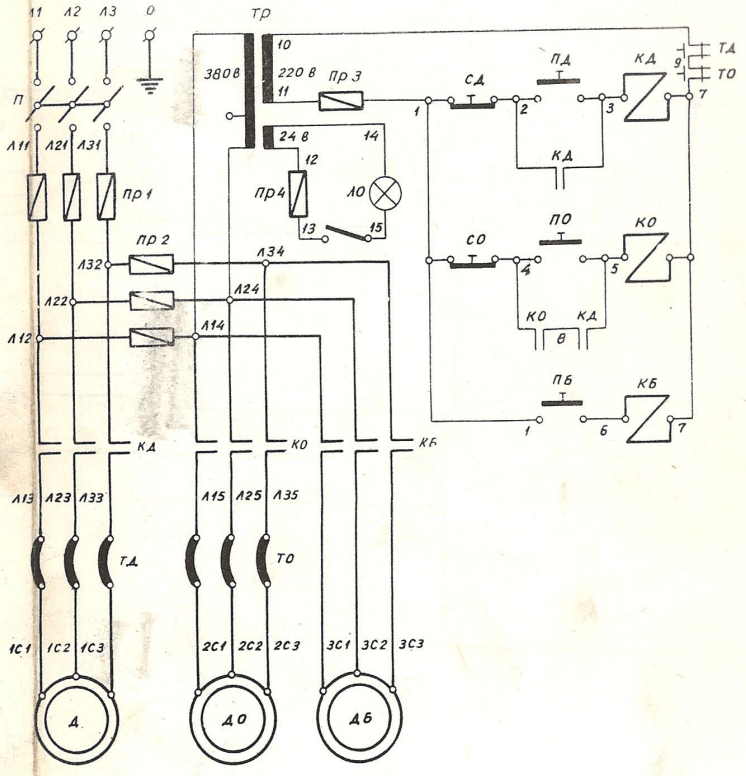
Фиг. 28 Fig.



Фиг. 29 Fig.



Фиг. 30 Fig.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Тр
10
380 в
220 в
11
Пр 3
П
Л11 Л21 Л31
Пр 1
24 в
14
12
Пр 4
ЛО
13
15
Пр 2
Л32
Л34
Л22
Л24
Л12
Л14
КД
КО
КБ
Л13 Л23 Л33
Л15 Л25 Л35
ТД
ТО
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2С1 2С2 2С3
3С1 3С2 3С3
Д
ДО
ДБ
СД
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КД
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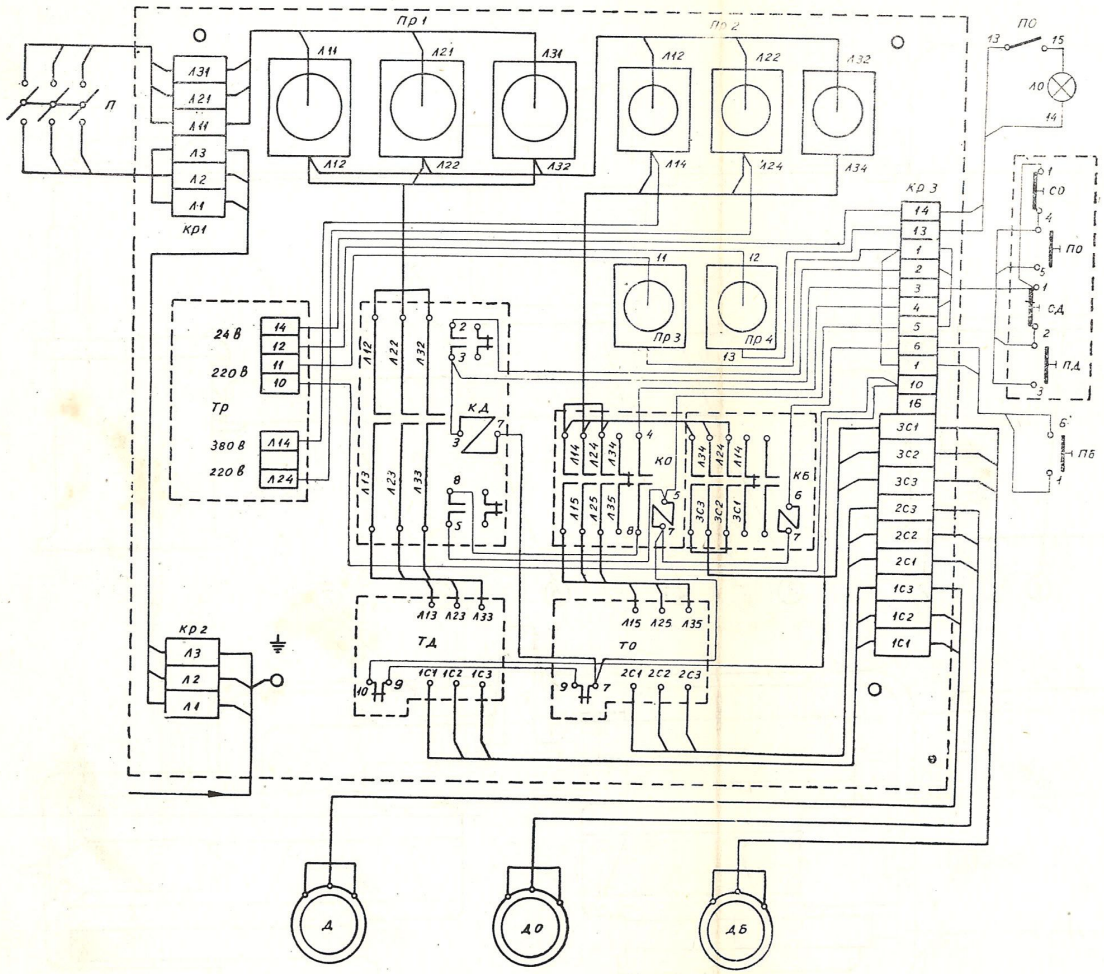
ТО
СО
ПО
КО
КД
В
ПБ
КБ

Фиг. 31 Fig.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Пр 2
П
Кр1
Кр 2
Кр 3
Тр
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КД
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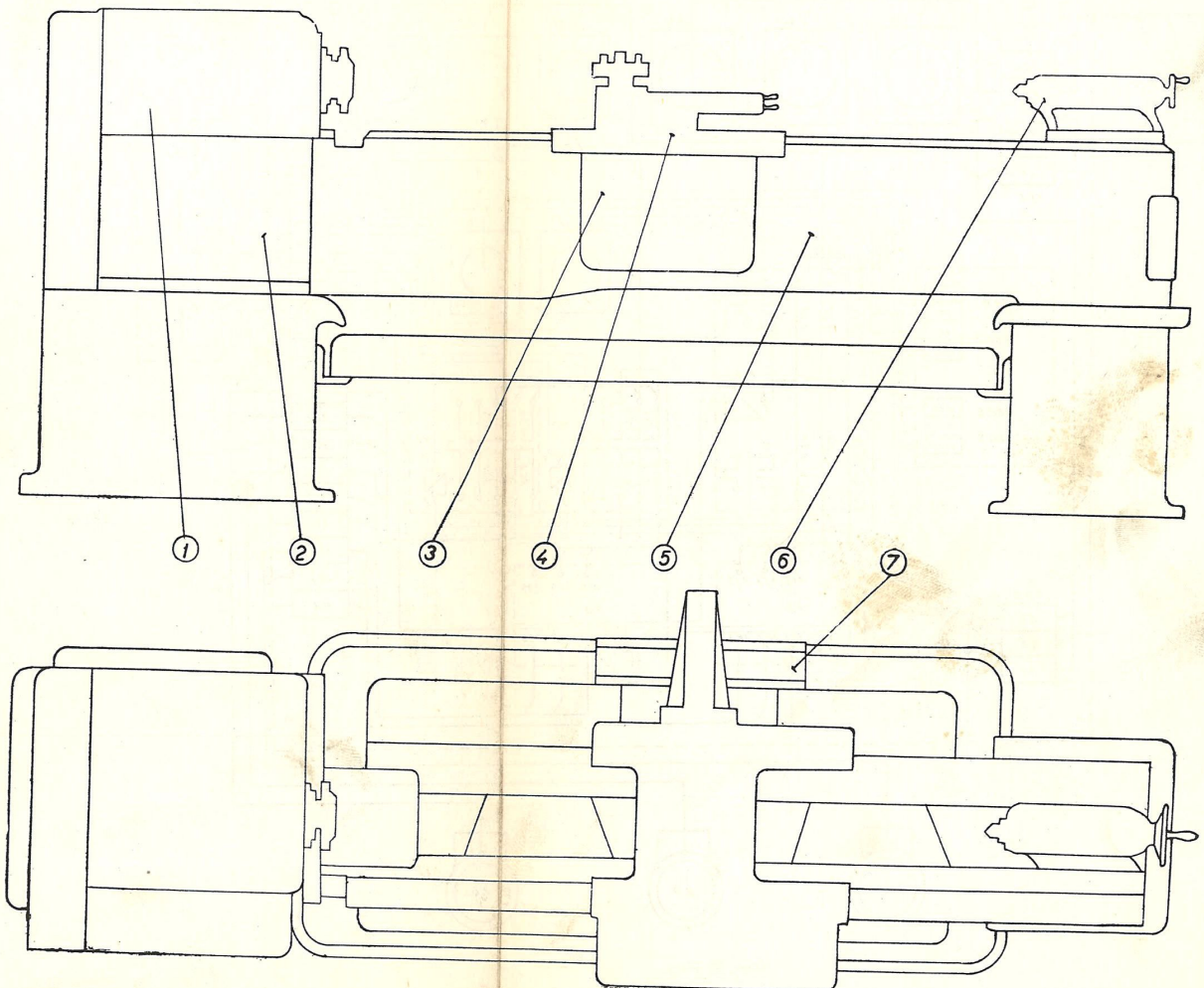
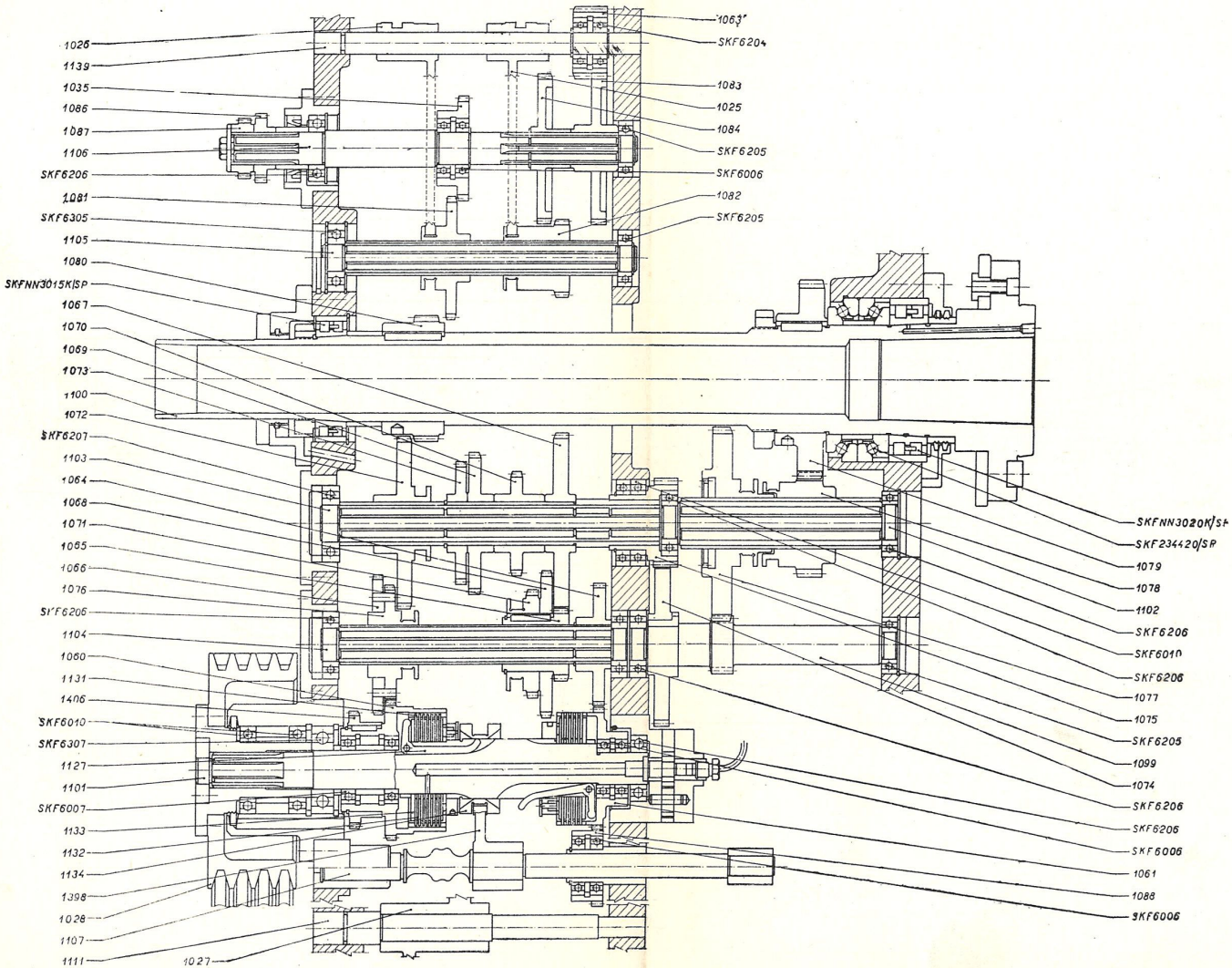
КБ
ТД
ТО
Пр 3
Пр 4
ПО
СО
СД
ПД
ПБ
Л0
Д
Д0
ДБ

Фиг. 32 Fig.



Фиг. 33 Fig.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1132
1134
1398
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1111
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1077
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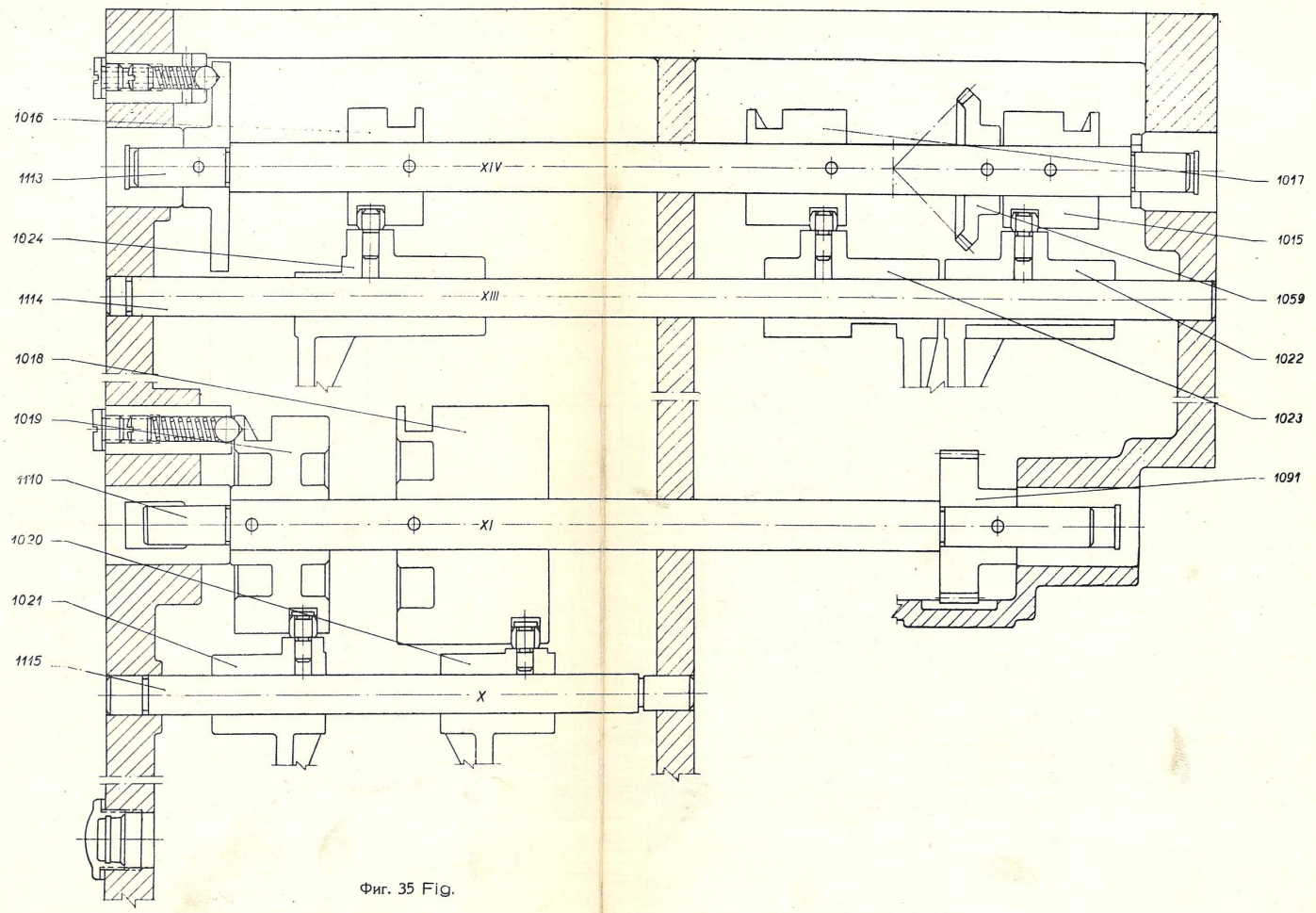
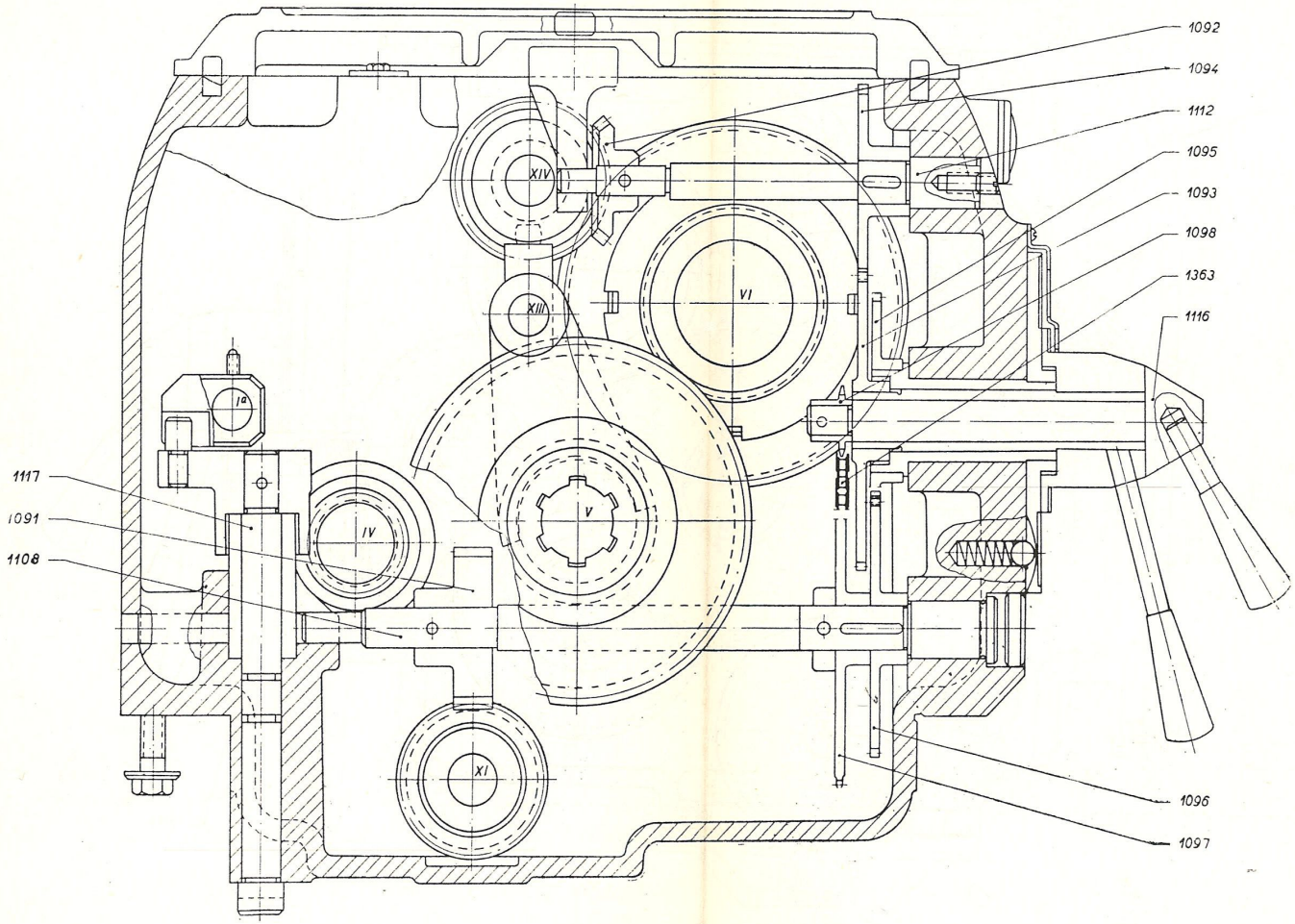
1061
1088
SKF6006

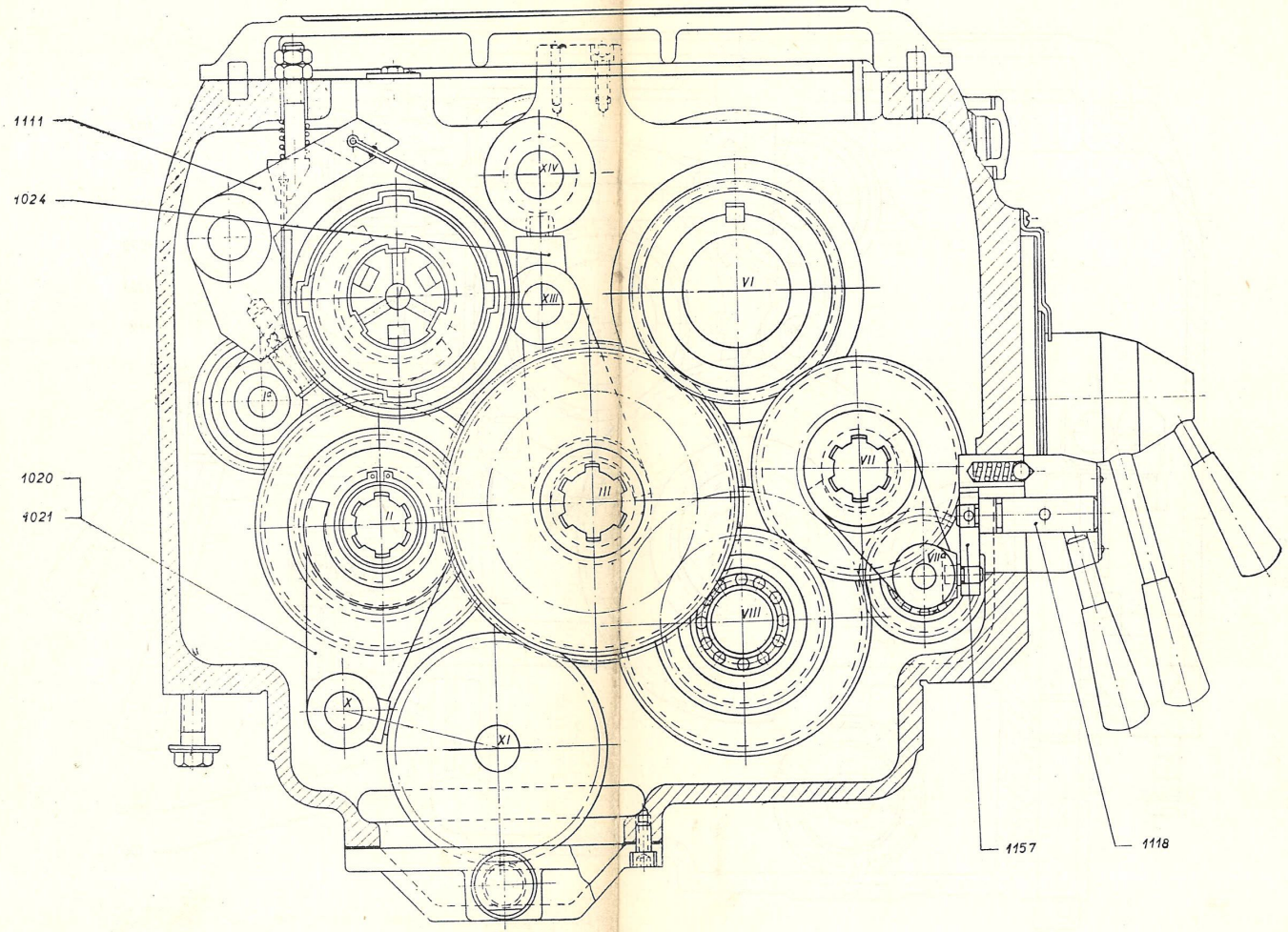
Фиг. 34 Fig.


1016
1113
1024
1114
1018
1019
1110
1020
1021
1115
XIV
XIII
XI
X
1017
1015
1059
1022
1023
1091

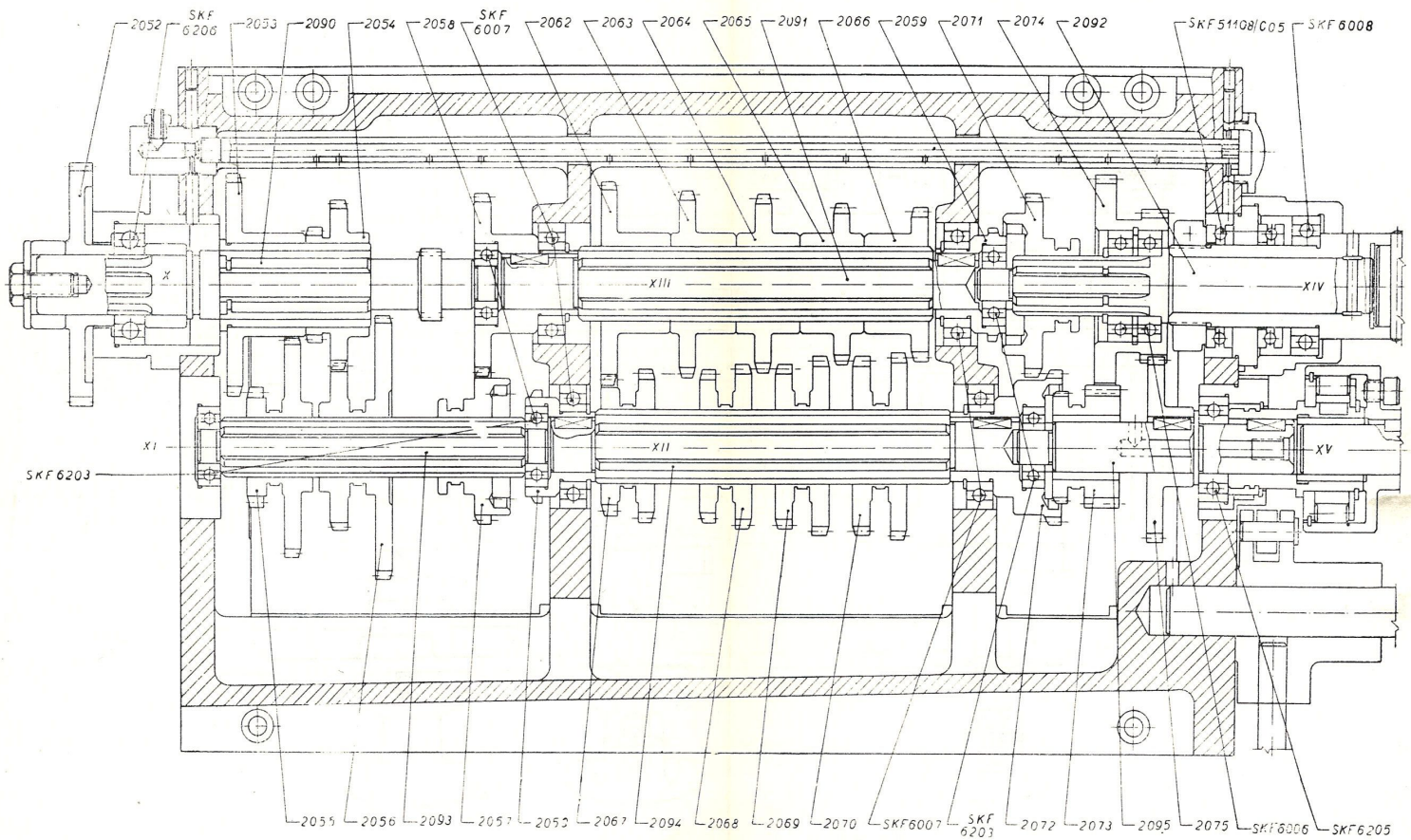
Фиг. 35 Fig.


1092
1094
1112
1095
1093
1098
1363
1116
1117
1091
1108
1096
1097
XIV
VI
XIII
Ia
IV
V
XI

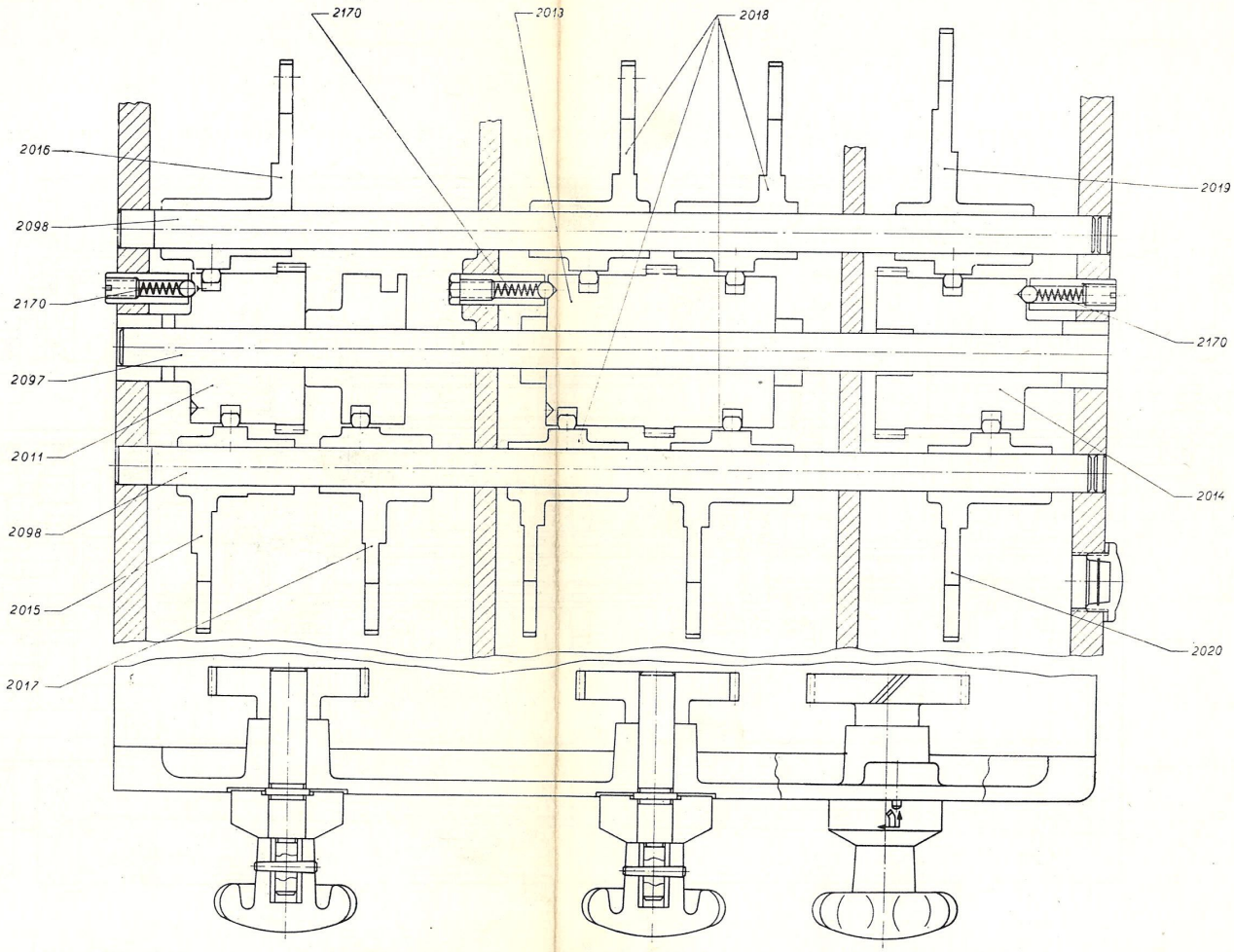
Фиг. 36 Fig.



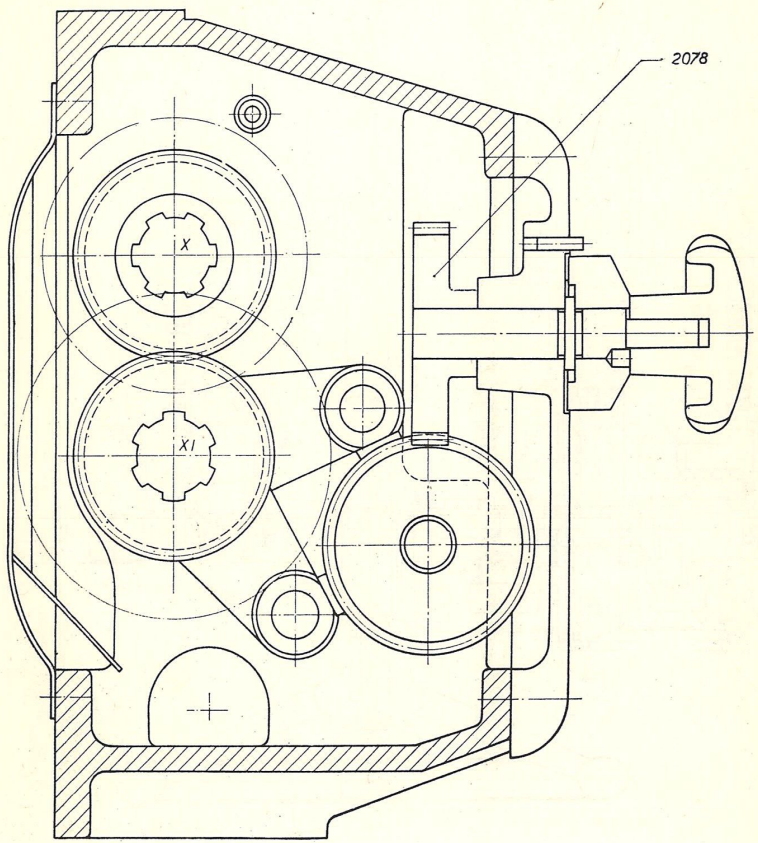
Фиг. 37 Fig.


2052
SKF 6206
2053
2090
2054
2058
SKF 6007
2062
2063
2064
2065
2091
2066
2059
2071
2074
2092
SKF 51108/C05
SKF 6008
X
XIII
XIV
XI
SKF 6203
XII
XV
2055
2056
2093
2057
2052
2067
2094
2068
2069
2070
SKF6007
SKF 6203
2072
2073
2095
2075
SKF6006
SKF6205

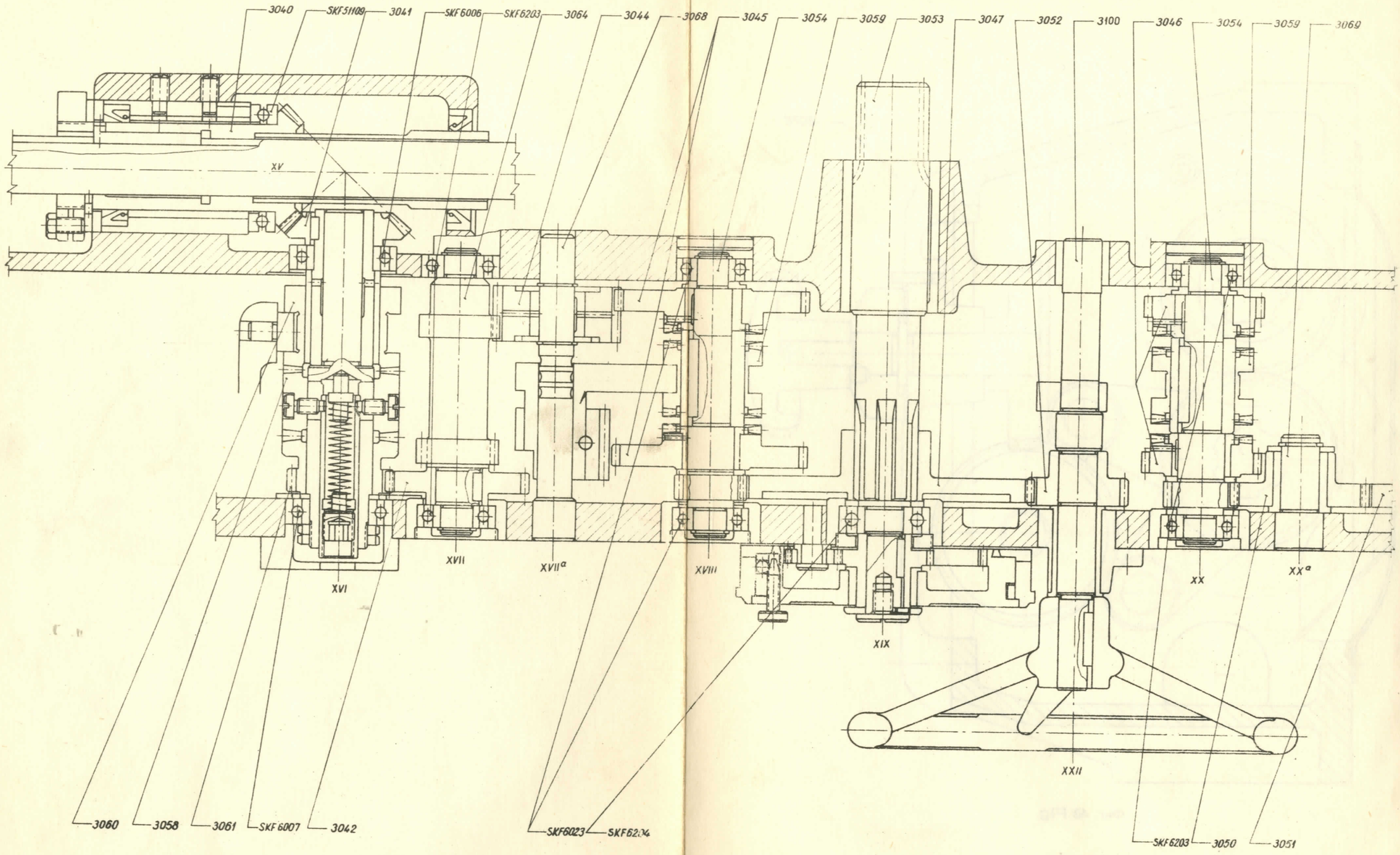
Фиг. 38 Fig.


2170
2013
2018
2016
2019
2098
2170
2170
2097
2011
2014
2098
2015
2020
2017

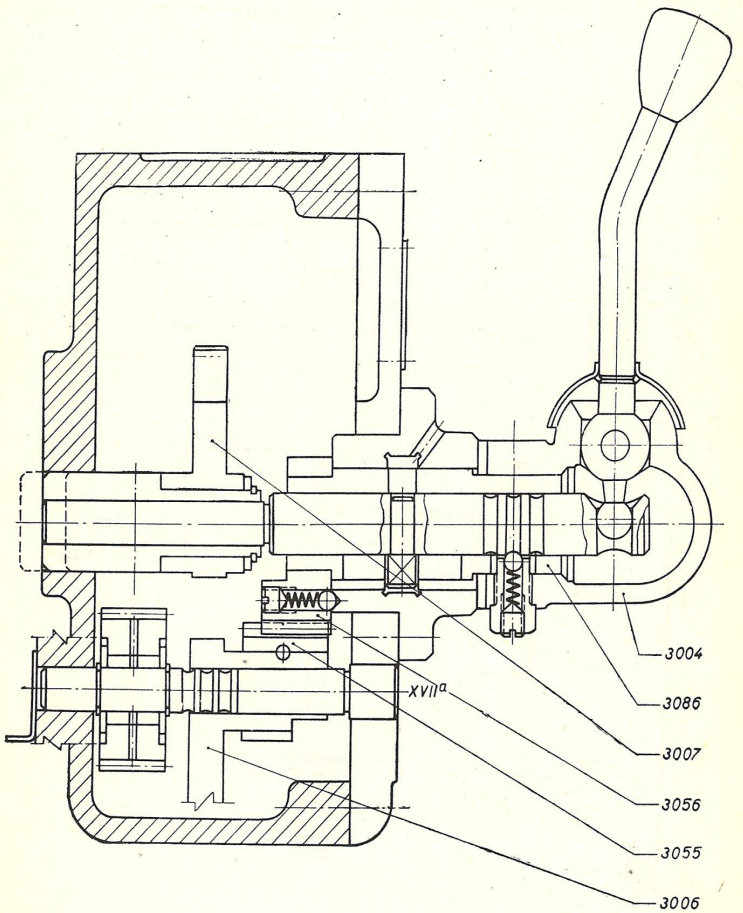
Фиг. 39 Fig.



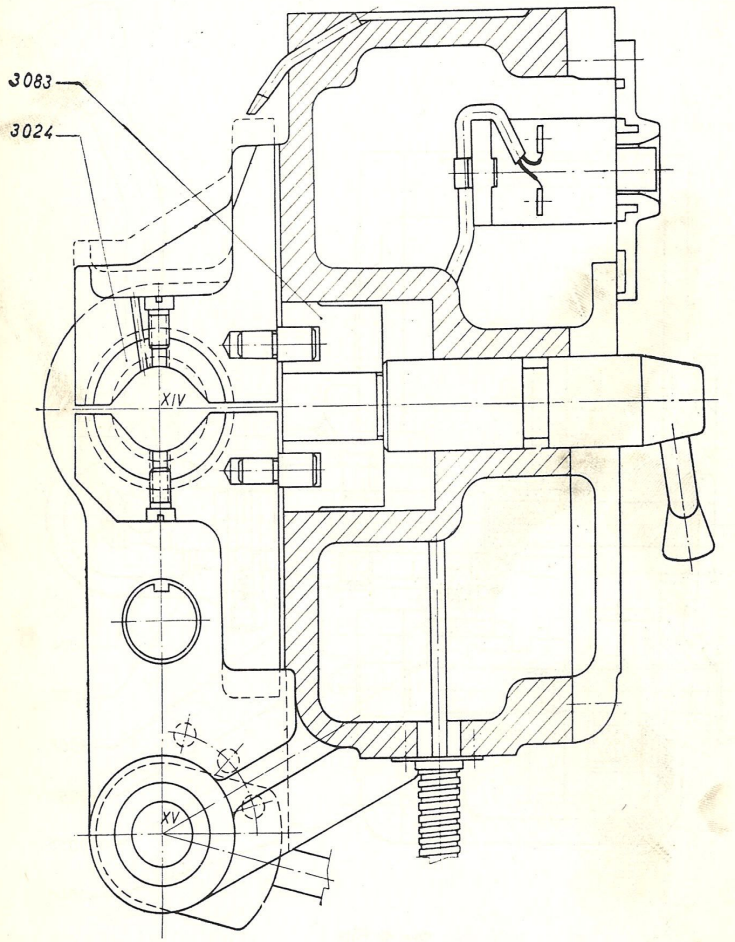
Фиг. 40 Fig.


3040
SKF51109
3041
SKF6006
SKF6203
3064
3044
3068
3045
3054
3059
3053
3047
3052
3100
3046
3054
3059
3069
XV
XVI
XVII
XVII^a
XVIII
XIX
XX
XX^a
XXII
3060
3058
3061
SKF6007
3042
SKF6023
SKF6204
SKF6203
3050
3051

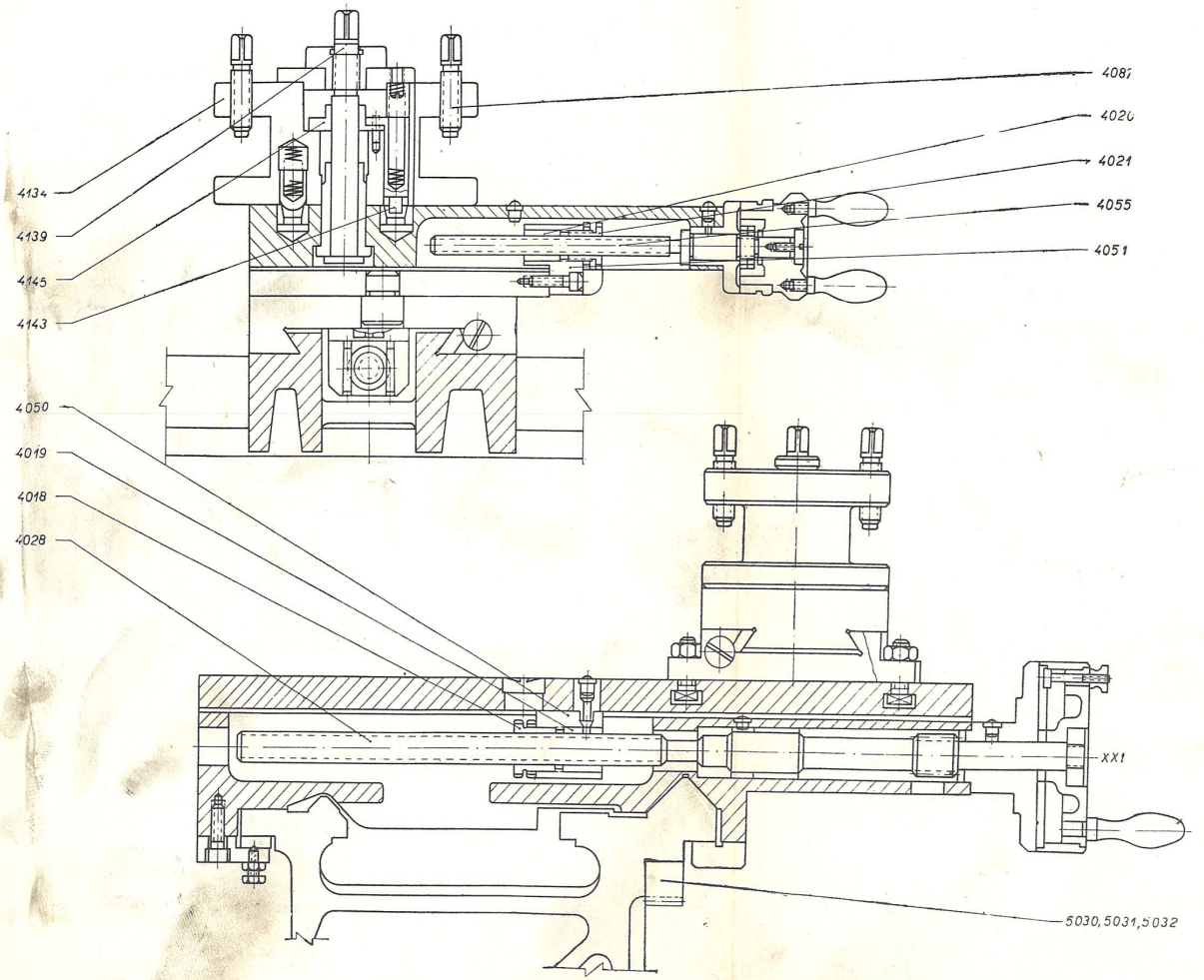
Фиг. 41 Fig.



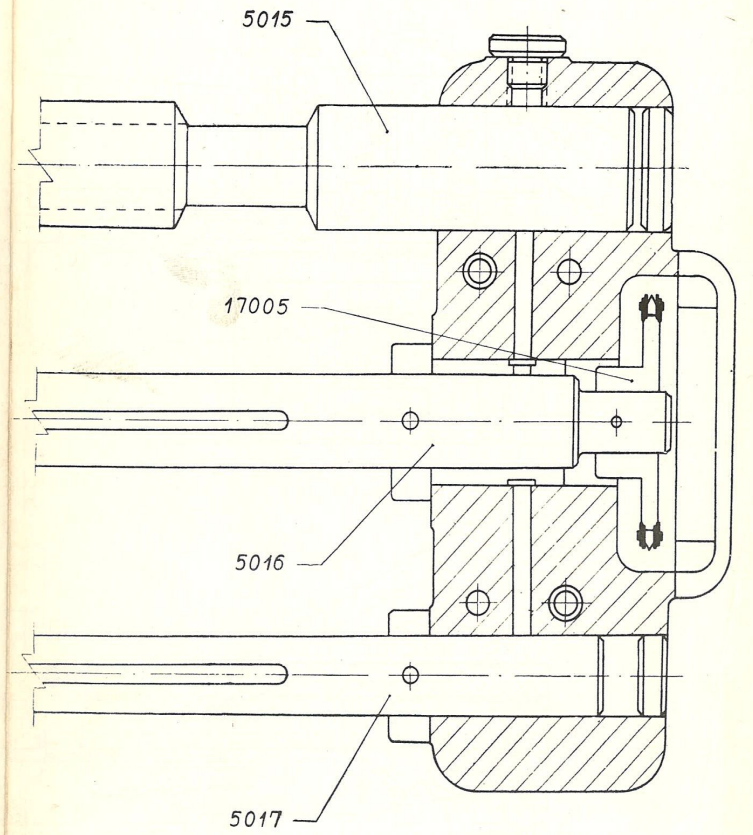
Фиг. 42 Fig.



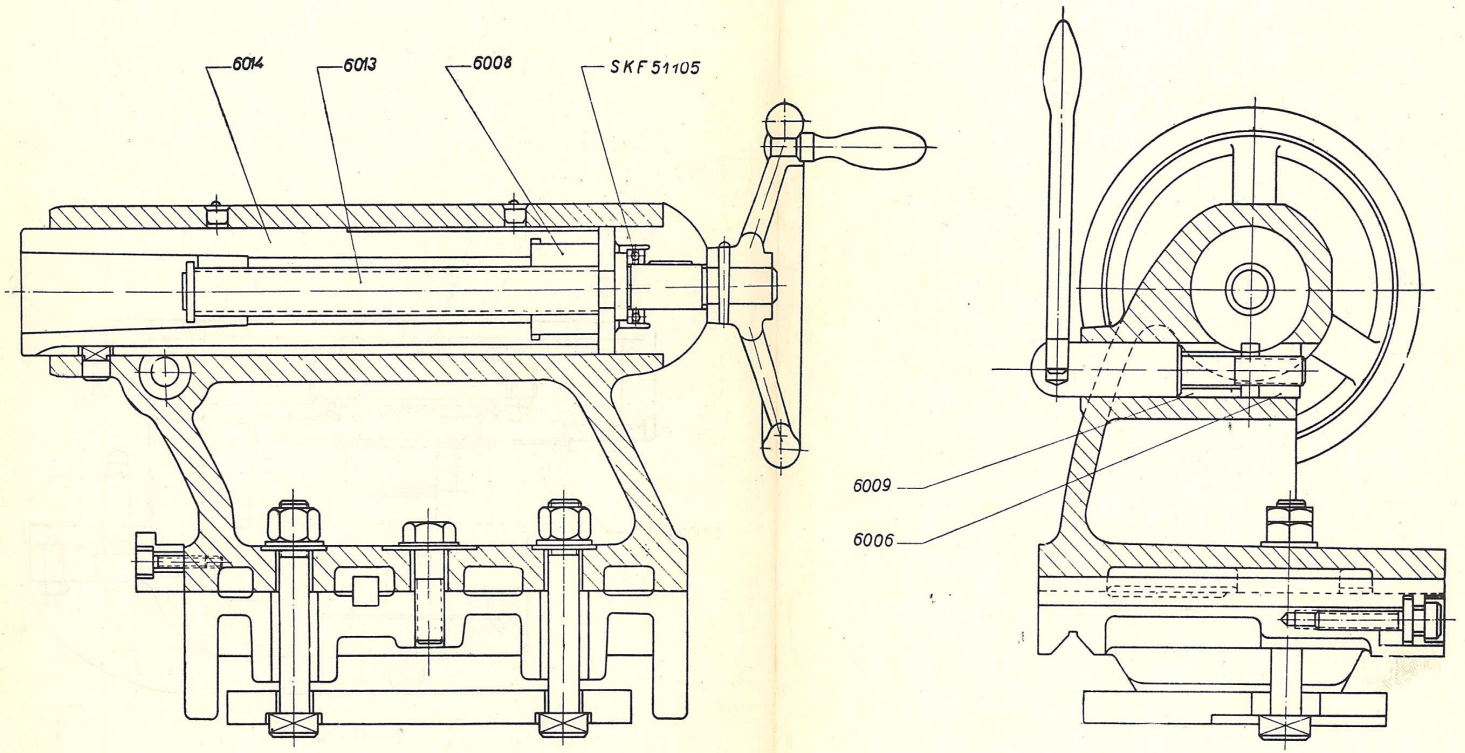
Фиг. 43 Fig.


4087
4020
4021
4055
4051
4134
4139
4145
4143
4050
4019
4018
4028
XX1
5030,5031,5032

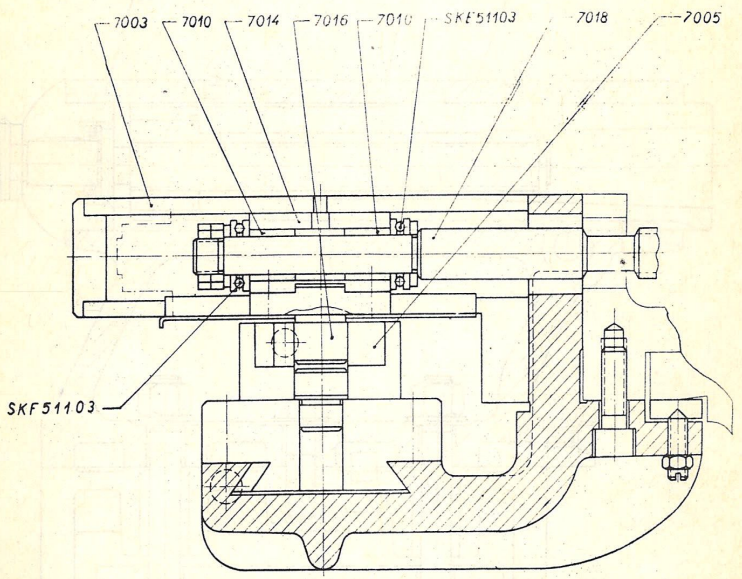
Фиг. 44 Fig.



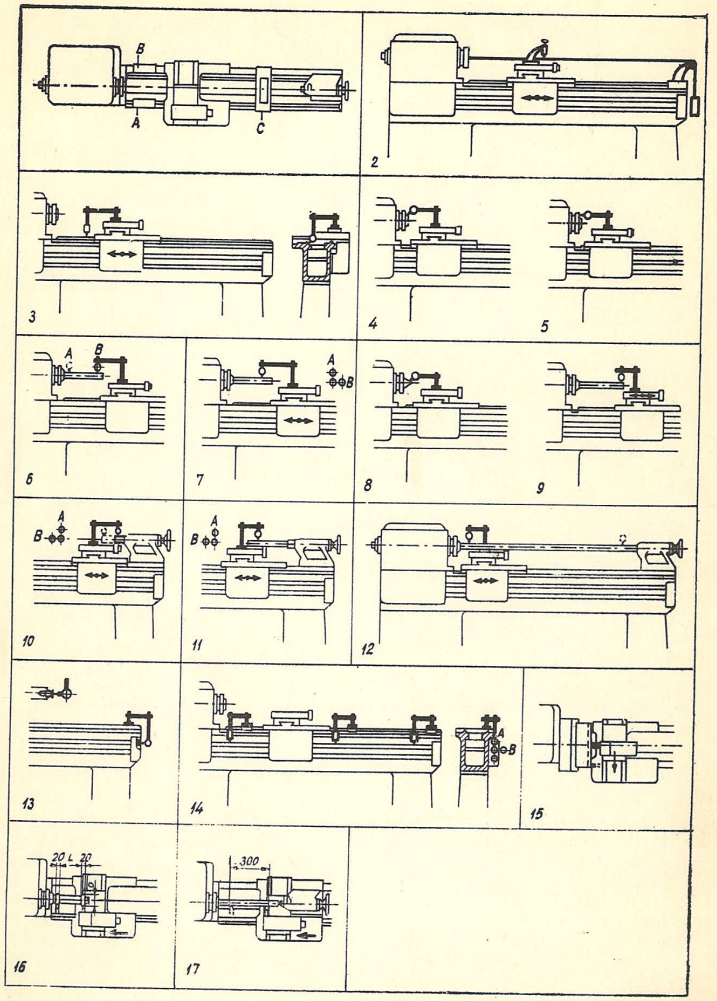
Фиг. 45 Fig.



Фиг. 46 Fig.



Фиг. 47 Fig.



Фиг. 48 Fig.