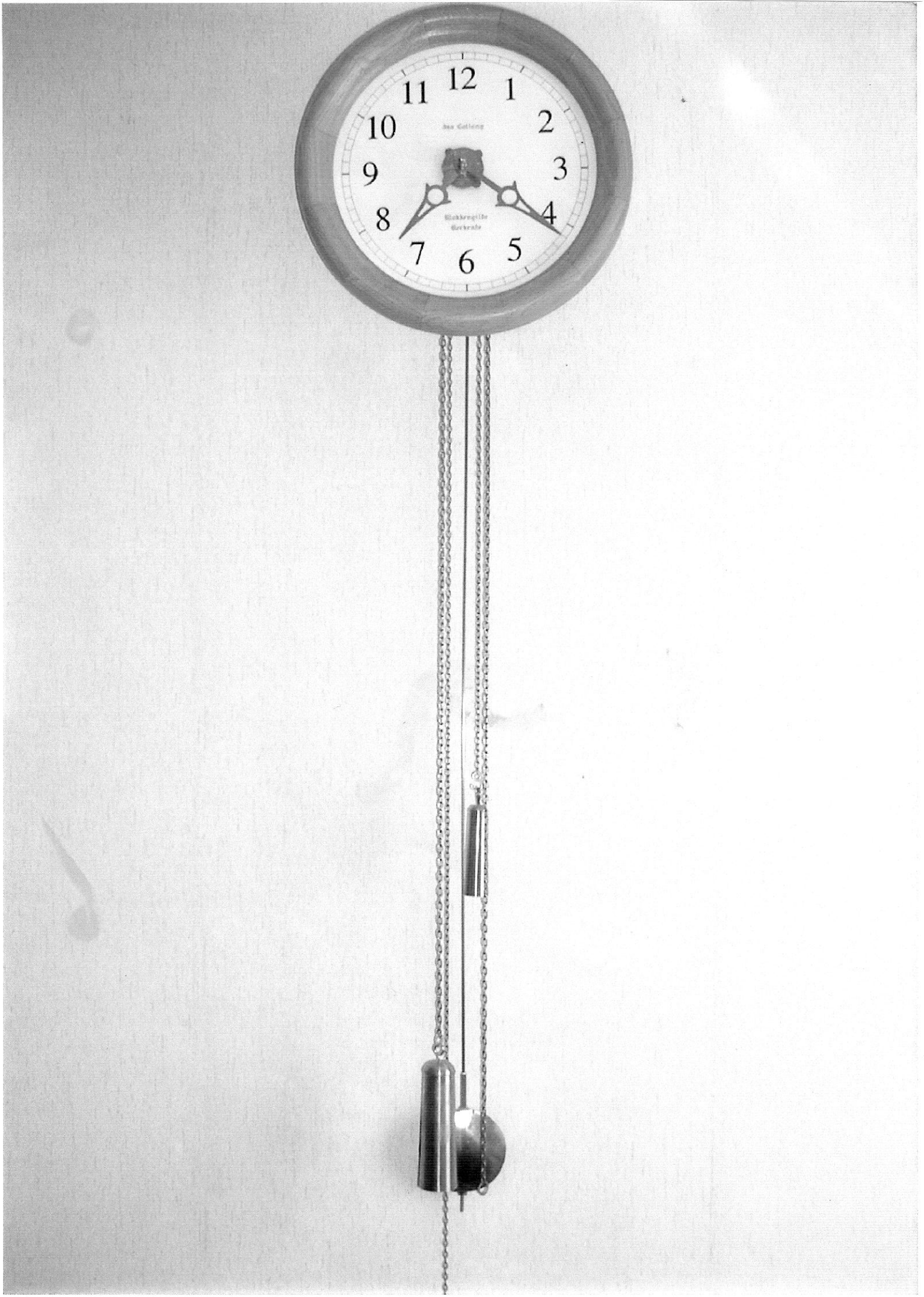
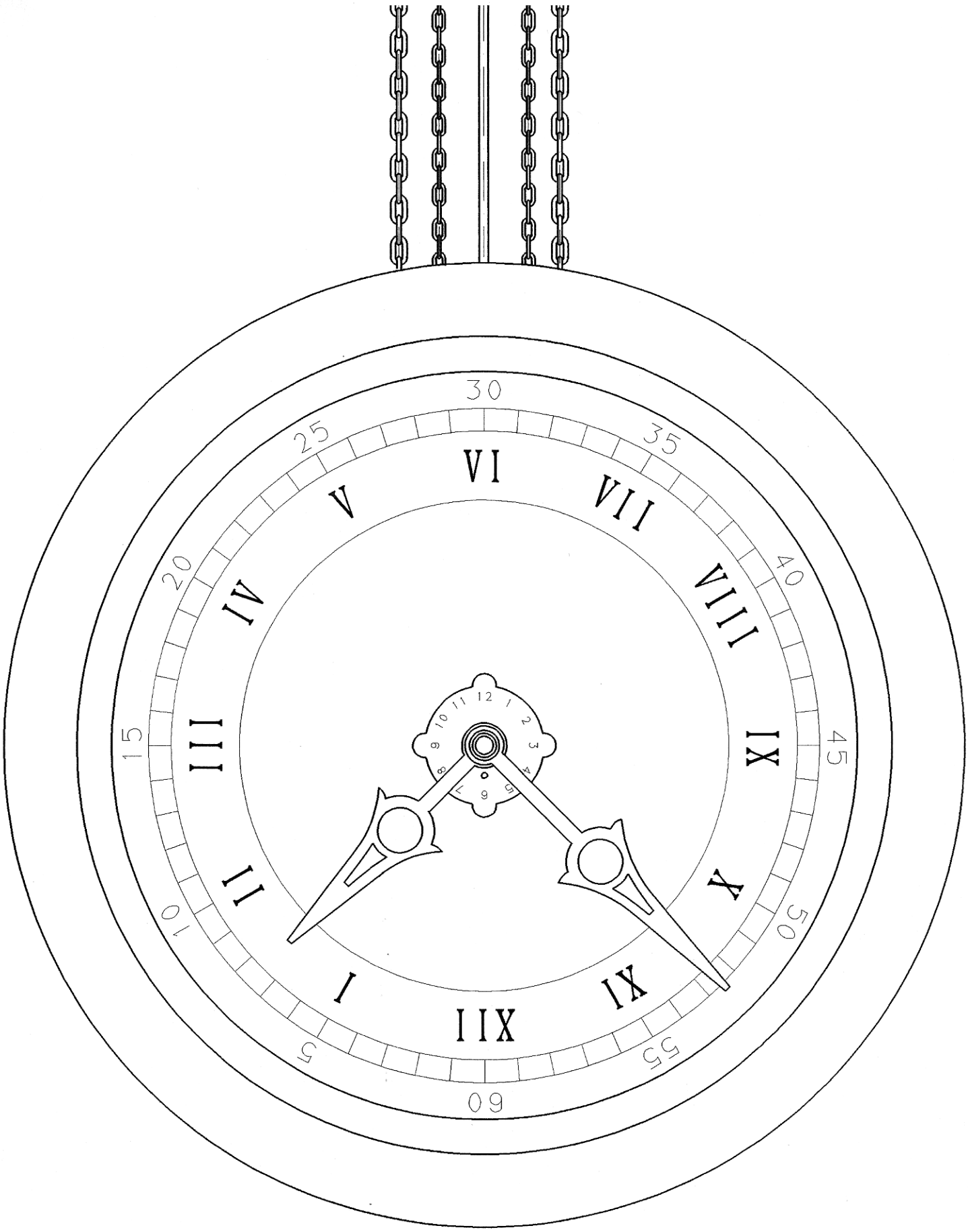
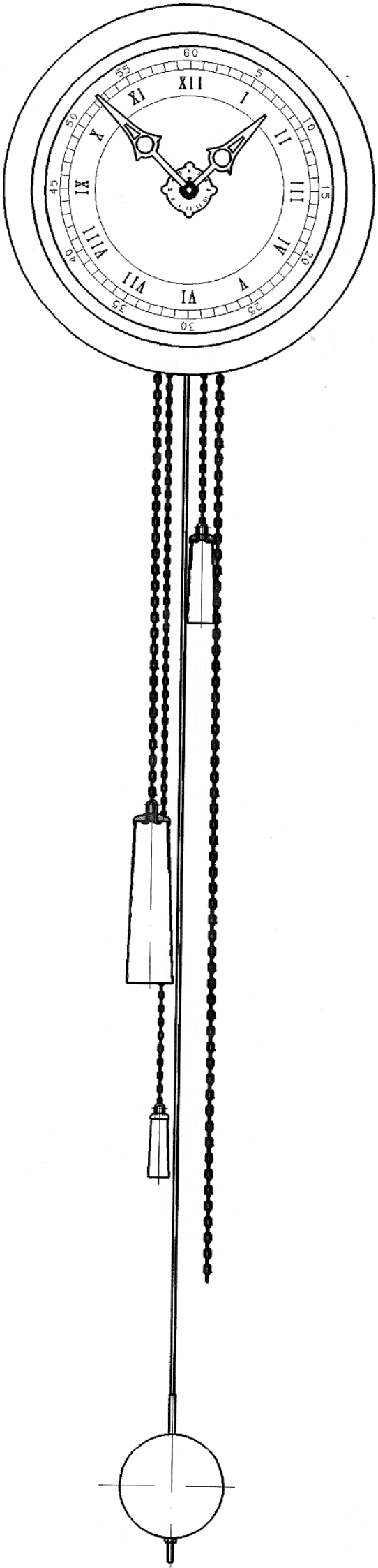
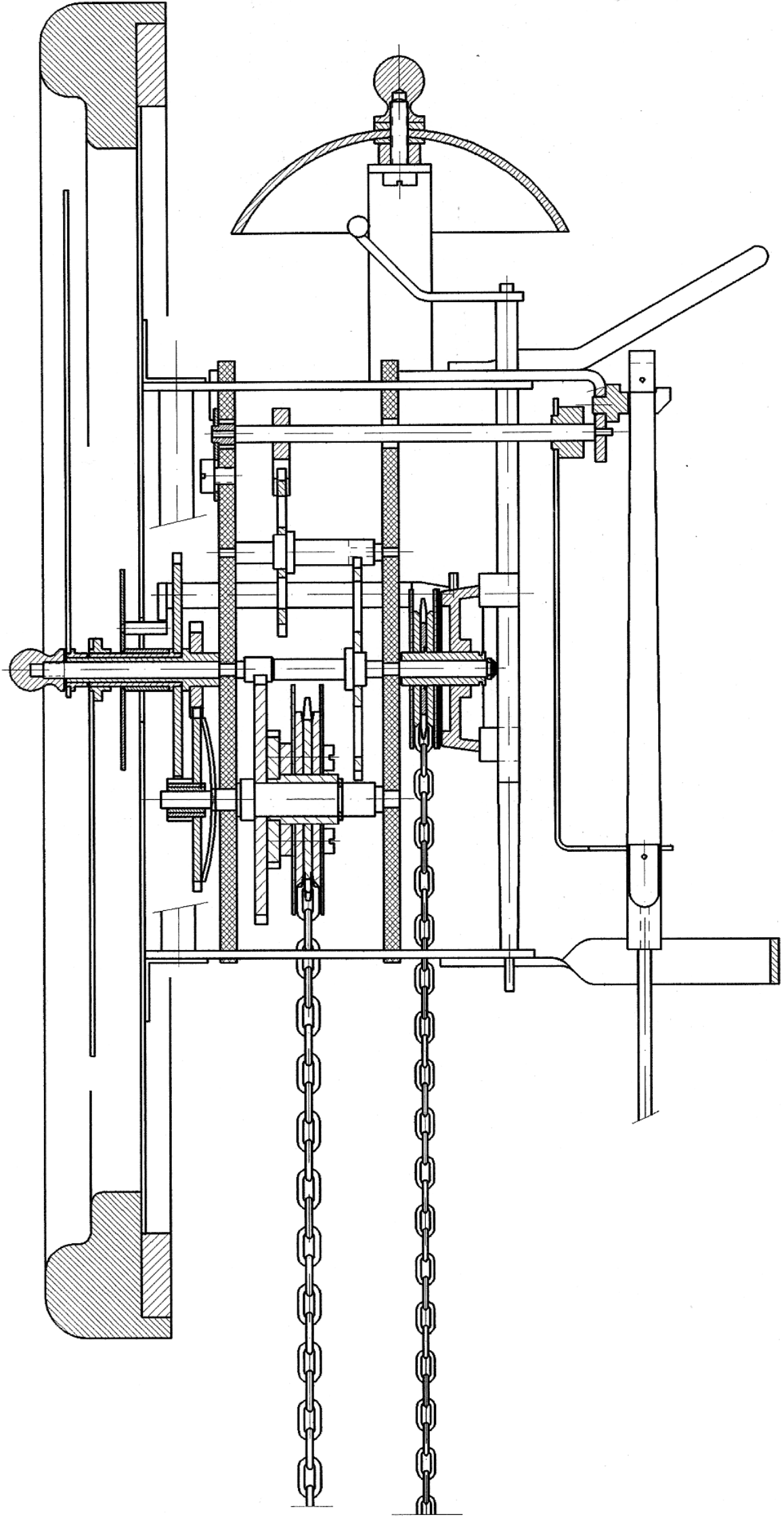
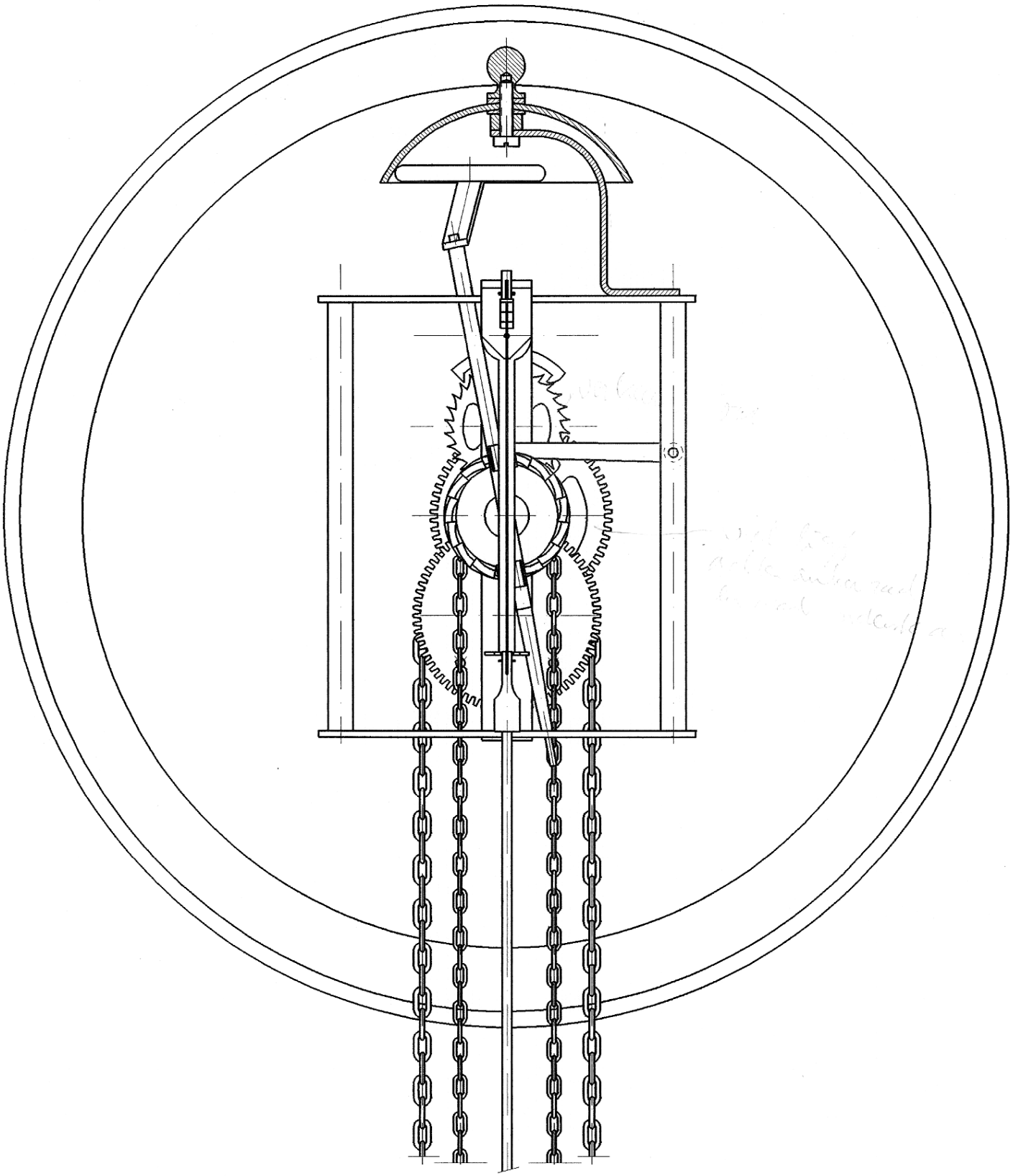
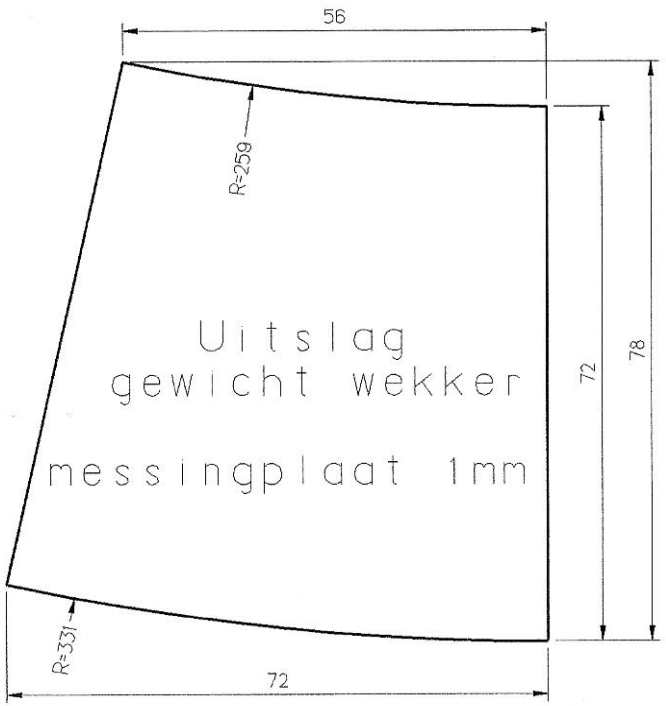

12
1
2
3
4
5
6
7
8
9
10
11

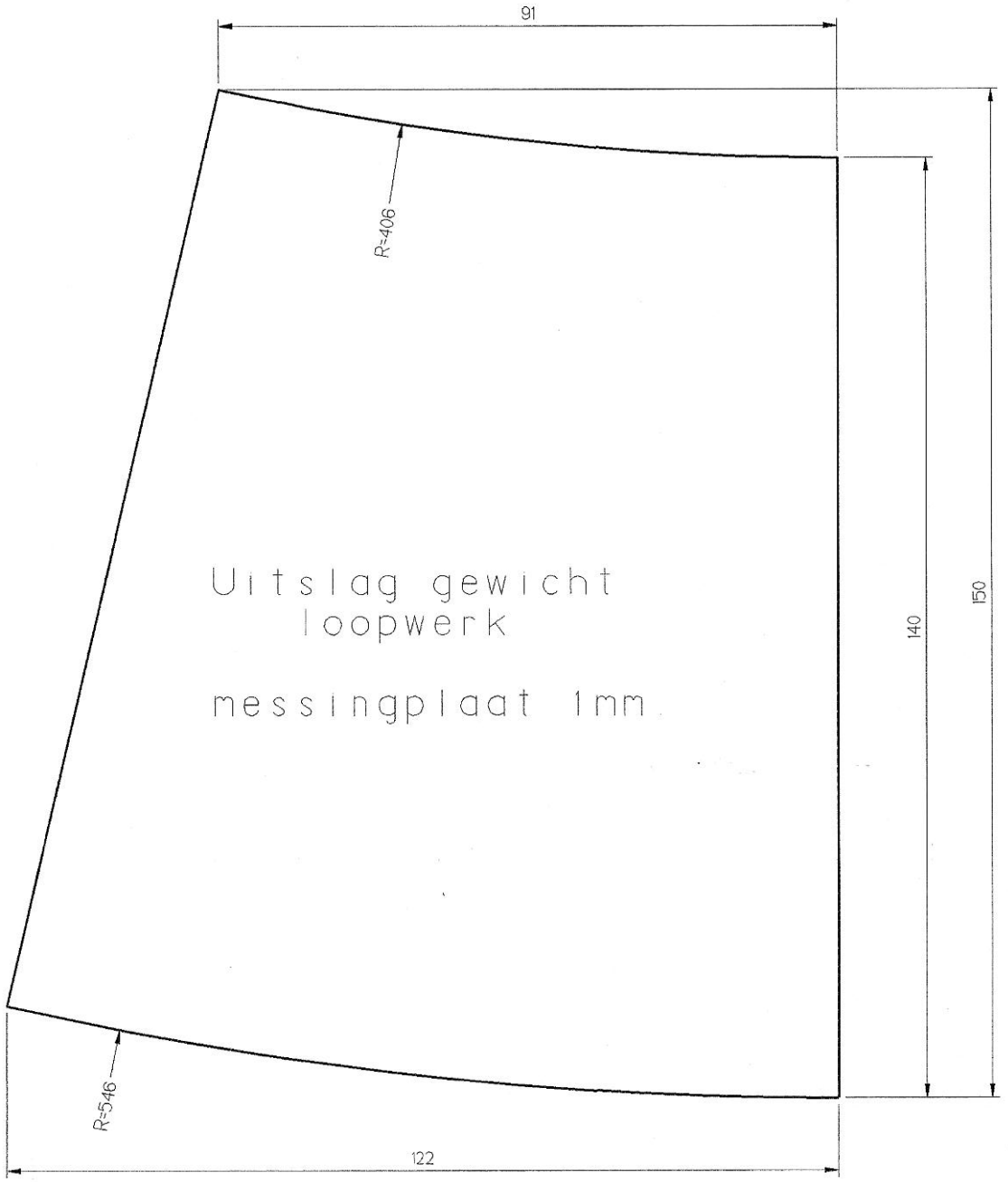

30
25
35
VI
V
VII
20
40
IV
VIII
15
45
III
IX
II
X
10
50
I
XII
XI
5
55
60


60
5
10
15
20
25
30
35
40
45
50
55
XII
I
II
III
IV
V
VI
VII
VIII
IX
X
XI

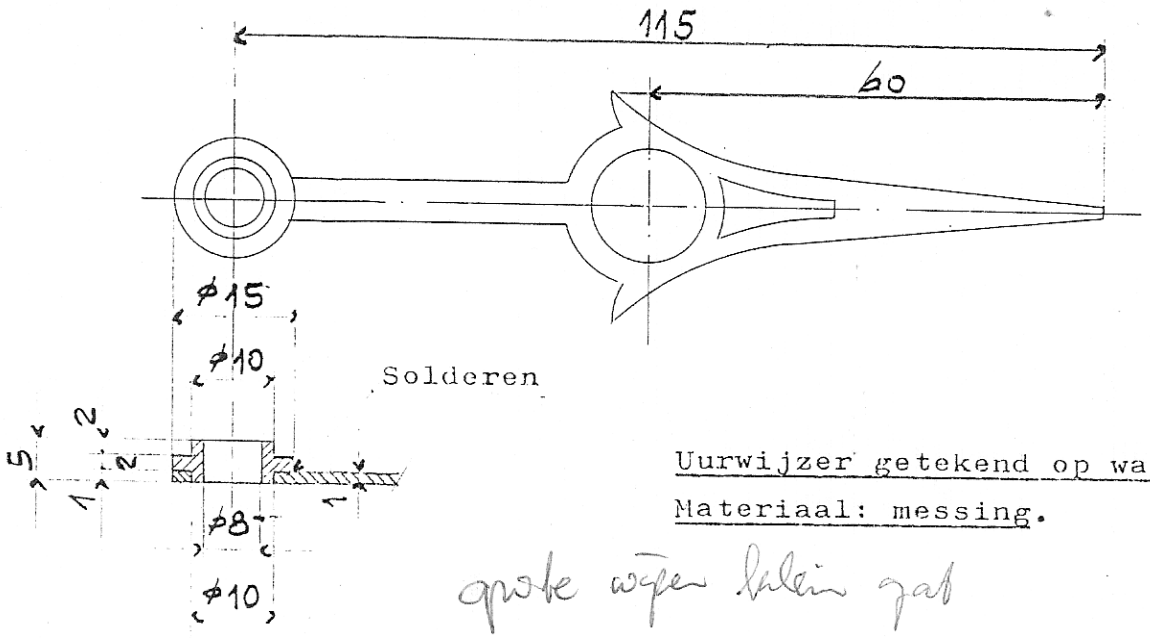





56
R=259
Uitslag
gewicht wekker
messingplaat 1mm
72
78
R=331
72


91
R=406
Uitslag gewicht
loopwerk
messingplaat 1mm
140
150
R=546
122

Meidenklok.

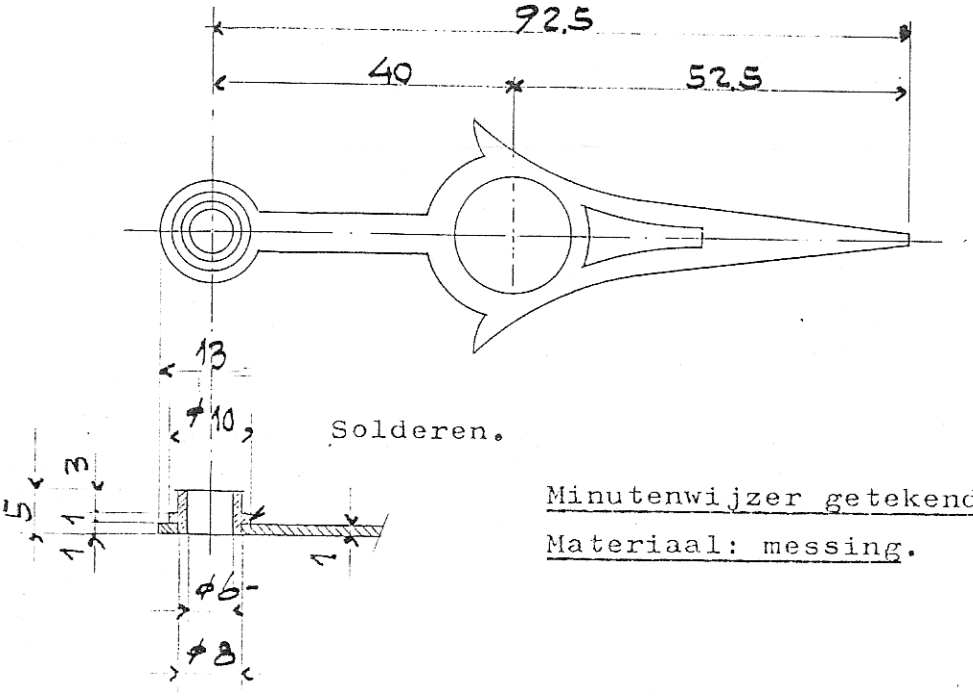


Uurwijzer getekend op ware grootte.

Materiaal: messing.

grote wijzer kleine gat

kleine wijzer / groot gat



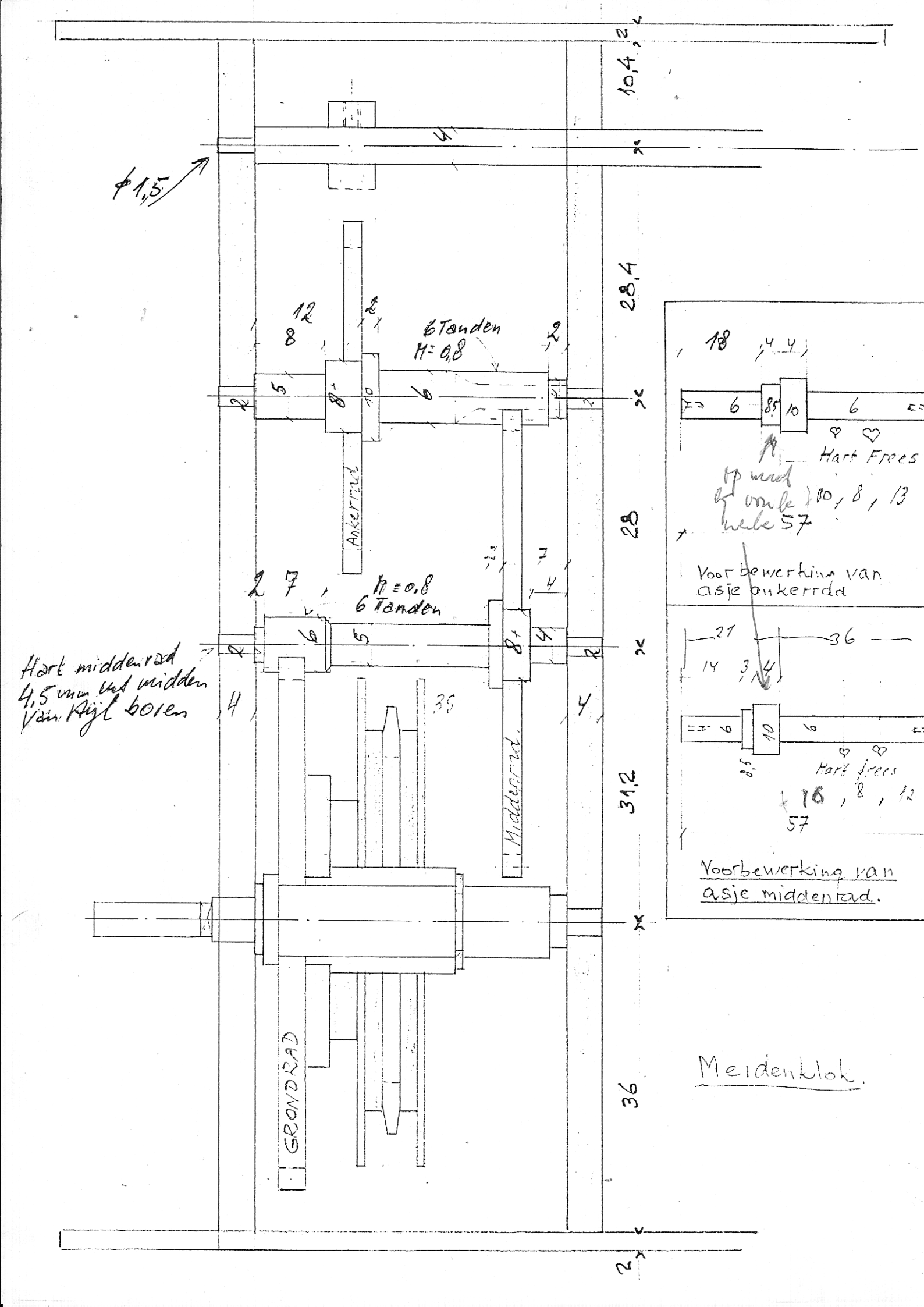
Minutenwijzer getekend op ware grootte.

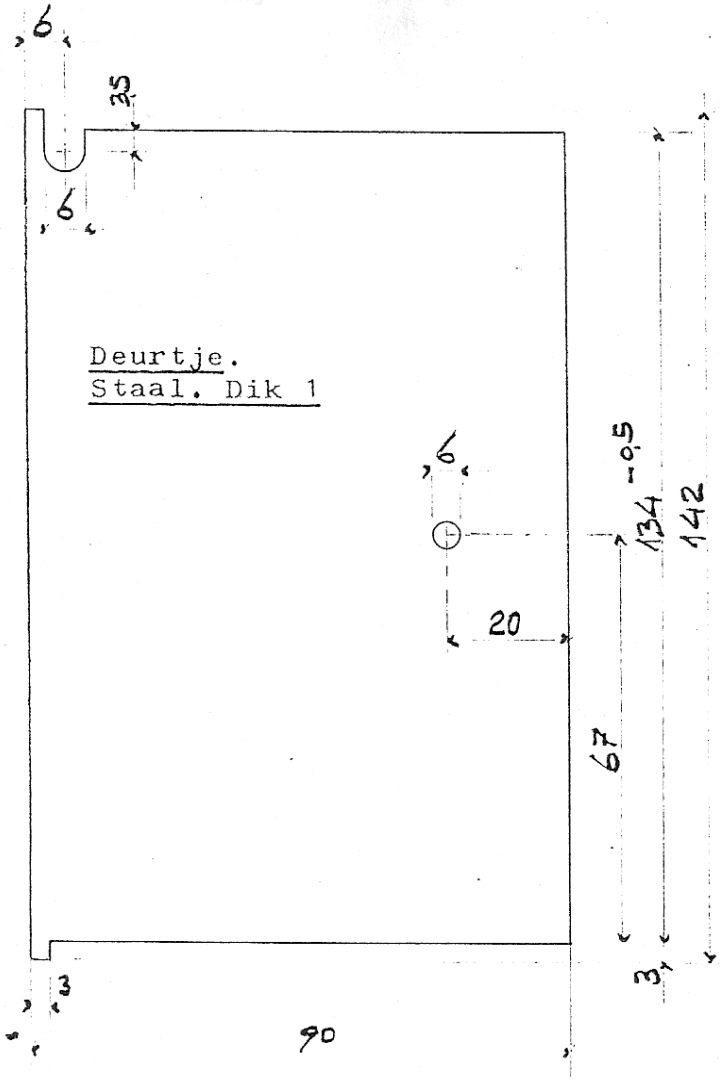
Materiaal: messing.

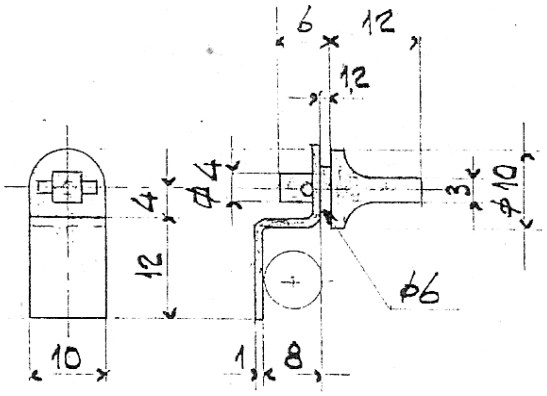
Te frezen raderen en rondsels voor Luikse Meidenklok.

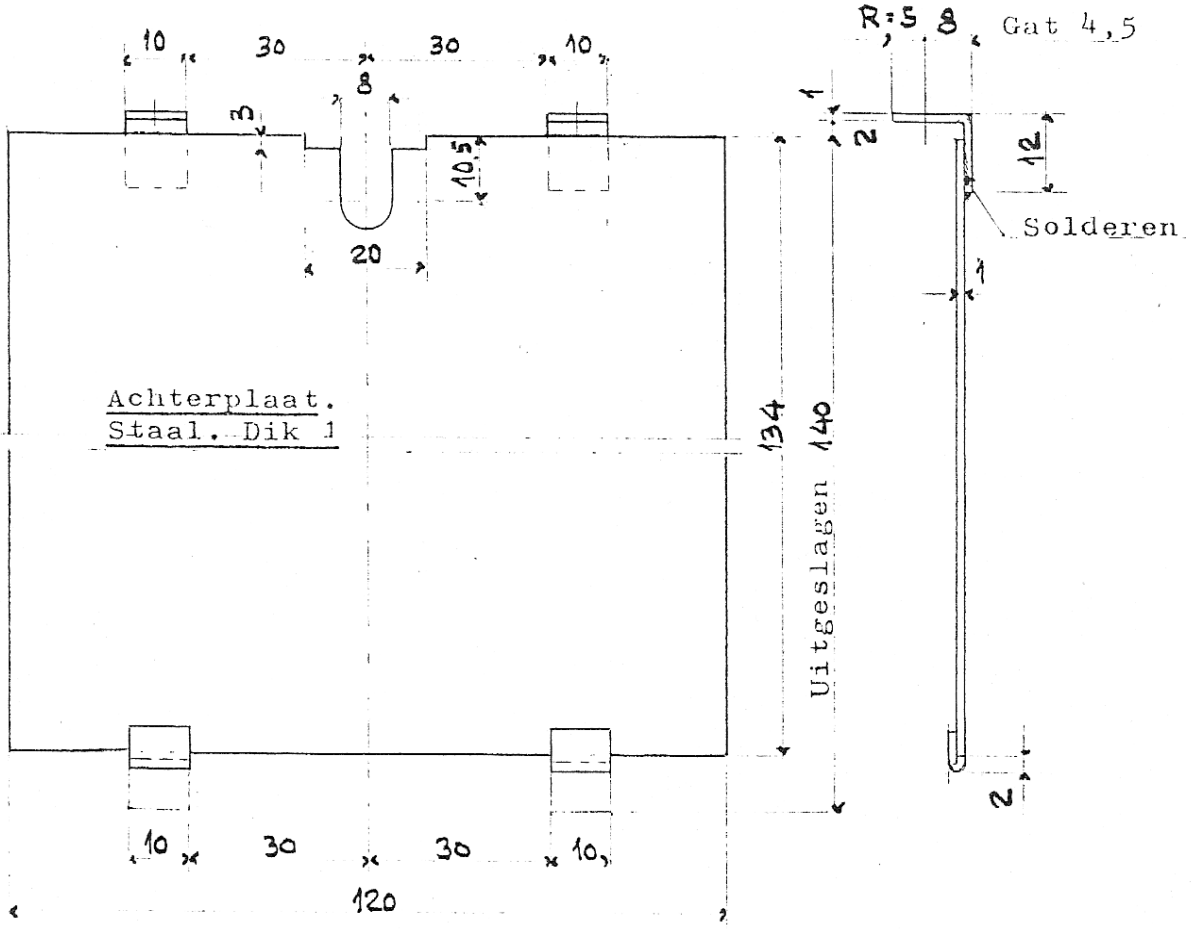
	Diameter	Dik	Aantal tanden	Modul	Frees-diepte	Instel-ling v. verdeelkop	Materi
Grondrad	59,76	3	72	0,8	2,32	10/18	Messing
Middenrad	53,36	2	64	0,8	2,32	5/8	Messing
Ankerrad	40,2	2	30	6 mm.	3	1 6/18	Messing
Minutenrad	23,02	3	28	0,75	2,5	1 9/21	Messing
Uurrad	56,02	2	72	0,75	2,5	10/18	Messing
Wisselrad	44,02	2	56	0,75	2,5	15/21	Messing
Rondsel wisselrad	~~10,11~~ 11,0	l=9	12	0,75	1,87	3 6/18	zilvers
Rondsel middenrad	5,98	l=43	6	0,8	1,99	6 12/18	Zilvers
Rondsel ankerrad	5,98	l=43	6	0,8	1,99	6 12/18	Zilvers
Wekkerrad	40	10	15		5	2 12/18	Messing
Palrad	33	3	31		1,5	1 9/31	Messing

anders,
ijzen.

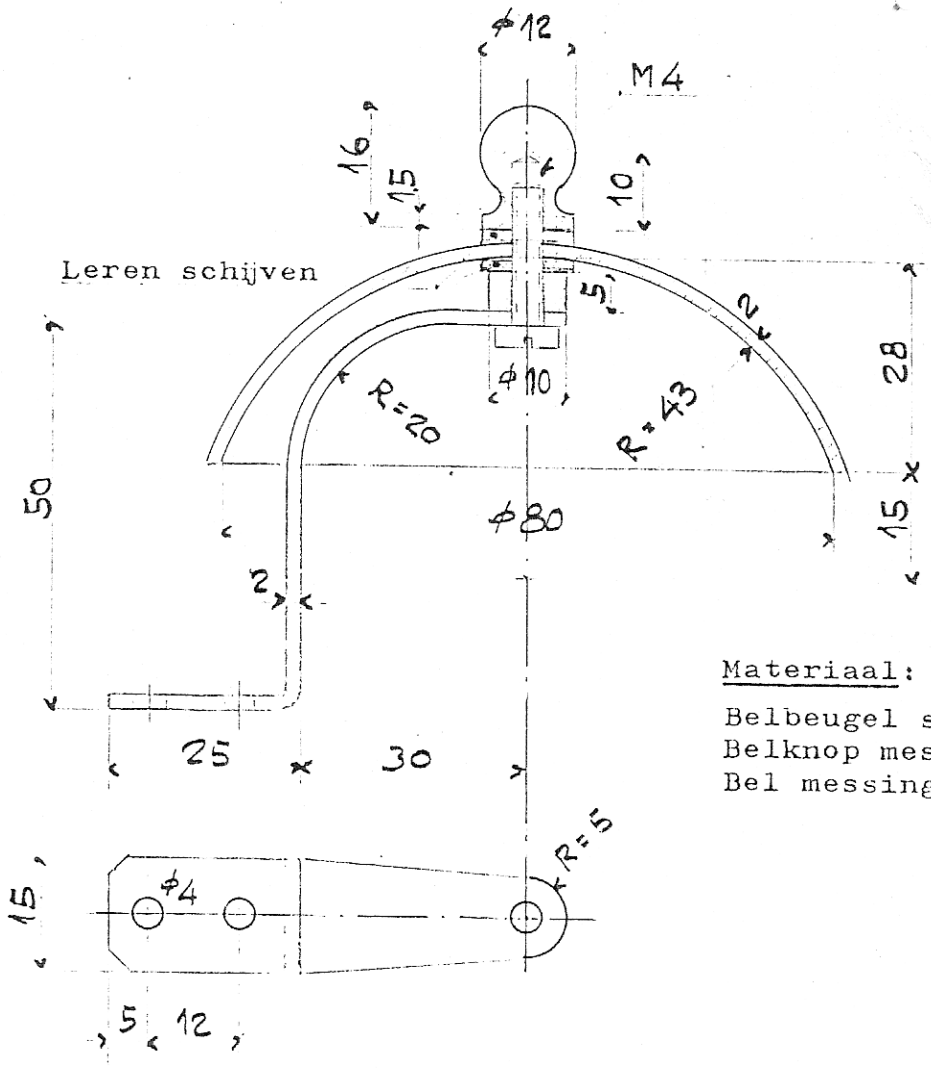

Ø 1,5
6 Tanden
M = 0,8
Ankerrad
Middenrad
GRONDRAD
Hart middenrad
4,5 mm uit midden
van Rijl boren
Voorbewerking van
asje ankerrad
Hart Frees
Voorbewerking van
asje middenrad.
Meidenklok.


6
35
6
Deurtje.
Staal. Dik 1
6
20
134 -0,5
142
67
3
3
90


6
12
12
4
Ø4
3
Ø10
12
Ø6
10
1
8

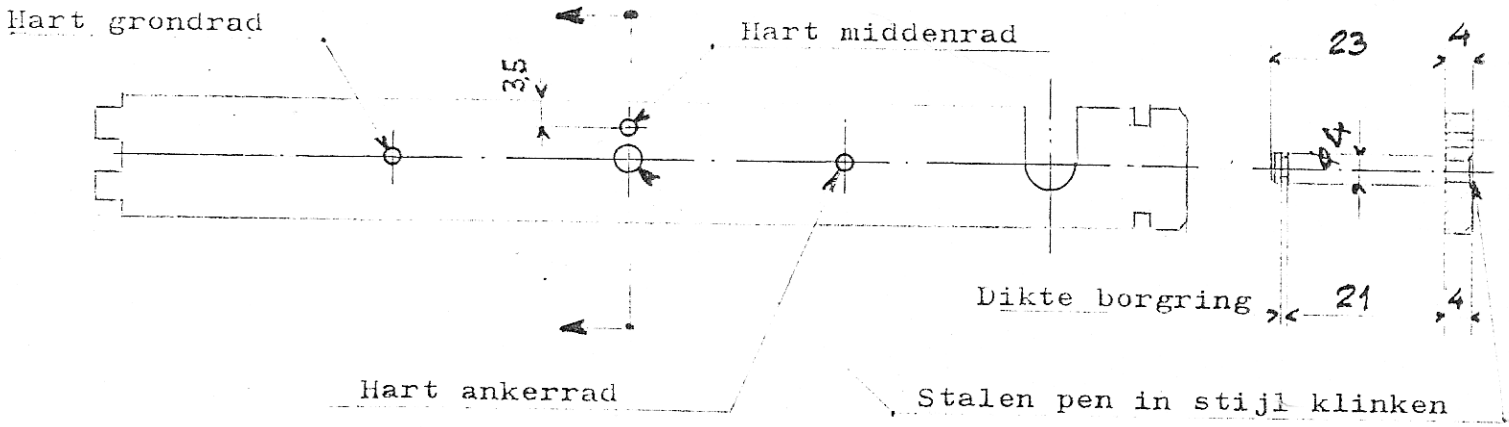

10
30
30
10
8
3
10,5
20
Achterplaat.
Staal. Dik 1
134
140
Uitgeslagen
10
30
30
10
120
R=5
8
Gat 4,5
1
2
12
Solderen
1
2

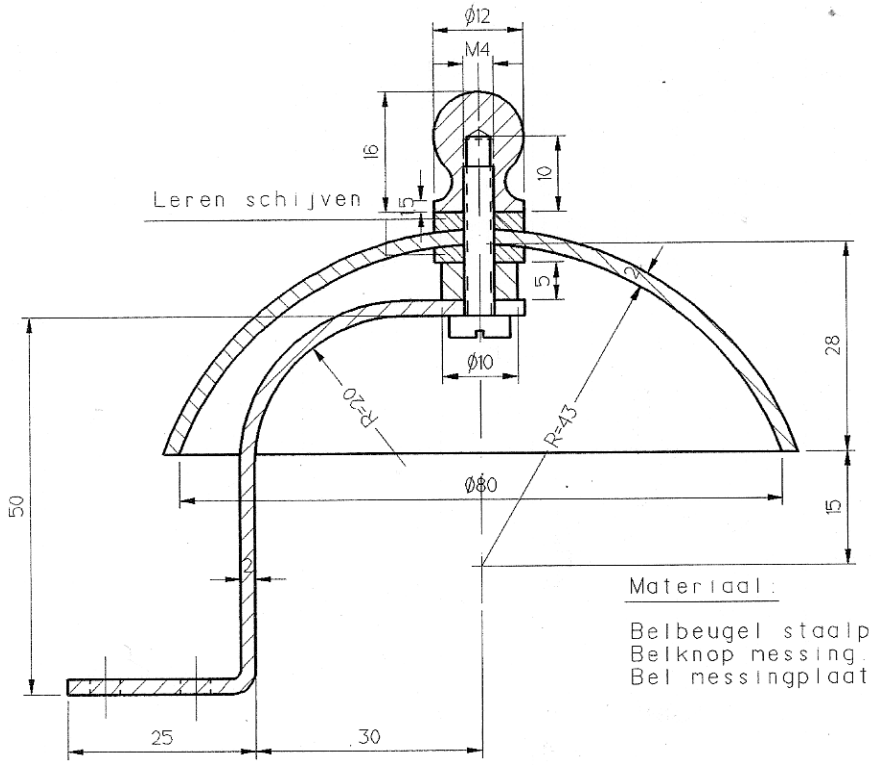
Meidenklok.



Materiaal:

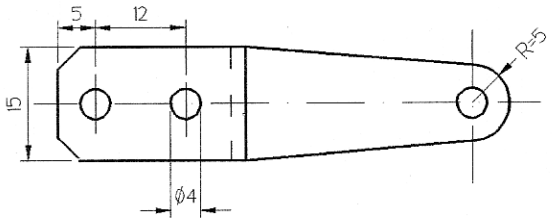
Belbeugel staalplaat.
Belknop messing
Bel messingplaat dik 2.

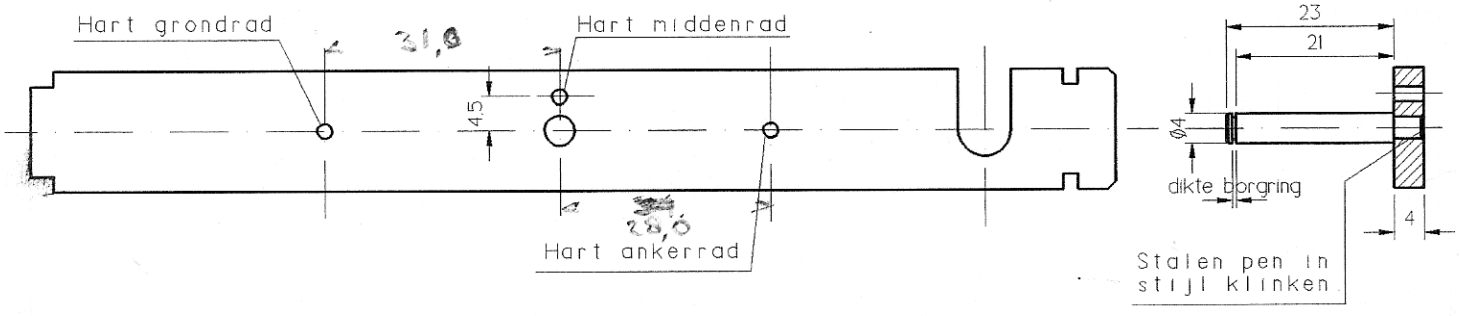




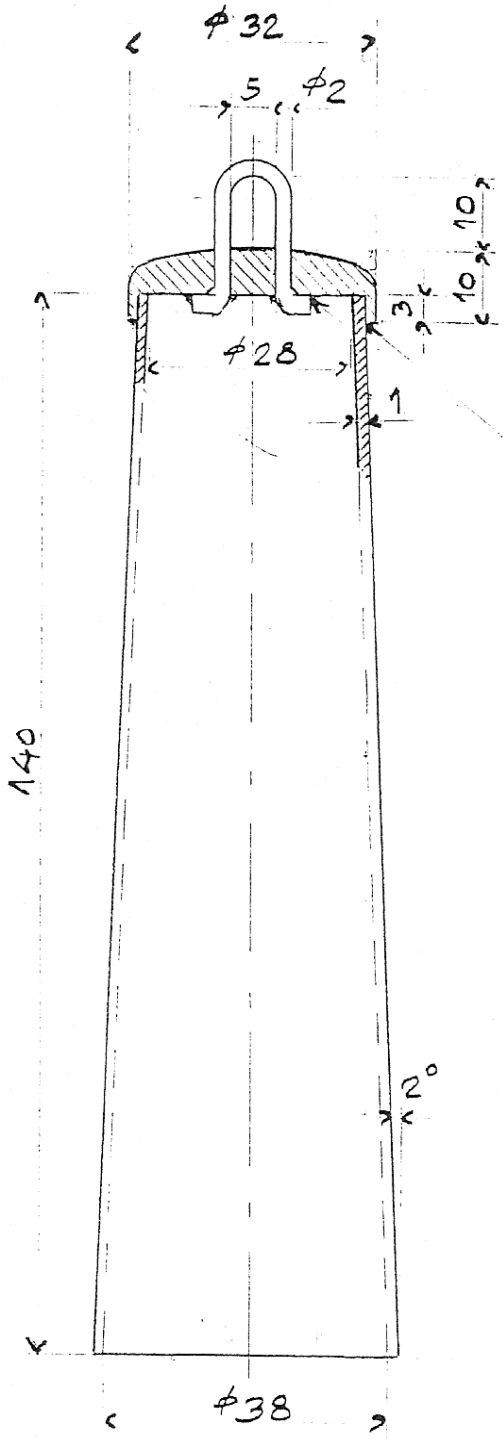
Materiaal:

Belbeugel staalplaat.
Belknop messing.
Bel messingplaat dik 2.

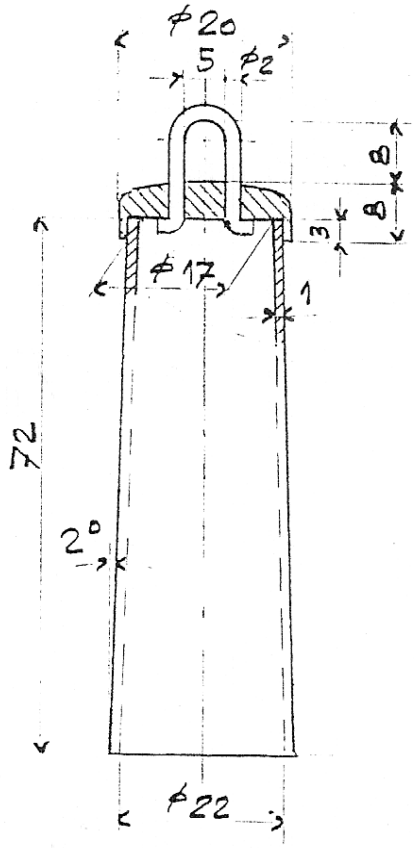




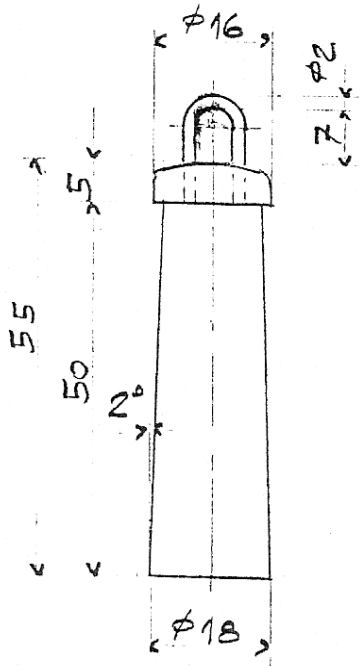
Meidenklok.



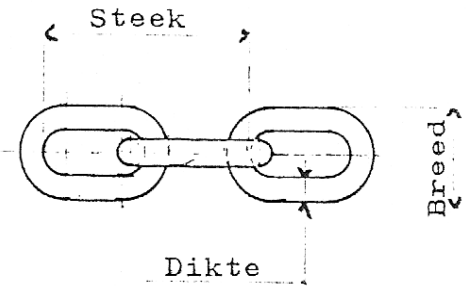
Gewicht voor loopwerk
Mantel messingpl. Dik 1
Volgieten met lood
Totaal gewicht ~~625~~ 1400 gram



Gewicht wekker
Mantel messingpl.
Volgieten met lood
Totaal gewicht ± 250 gram



Contragewicht wekker
Massief messing
Totaal gew. ± 100 gr.

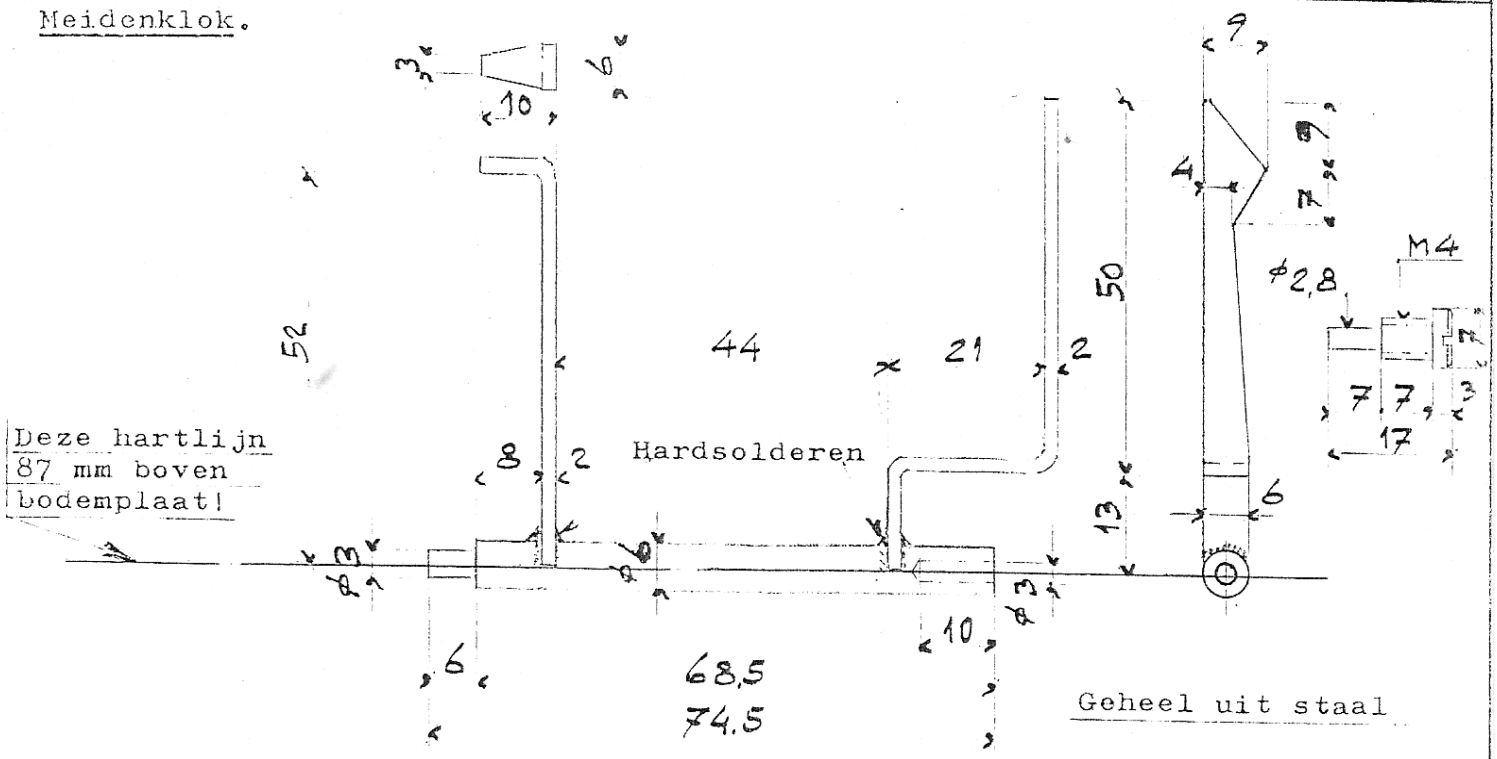


Ketting voor loopwerk.
Steek = 13,8
Breedte 5,4
Dikte 1,5

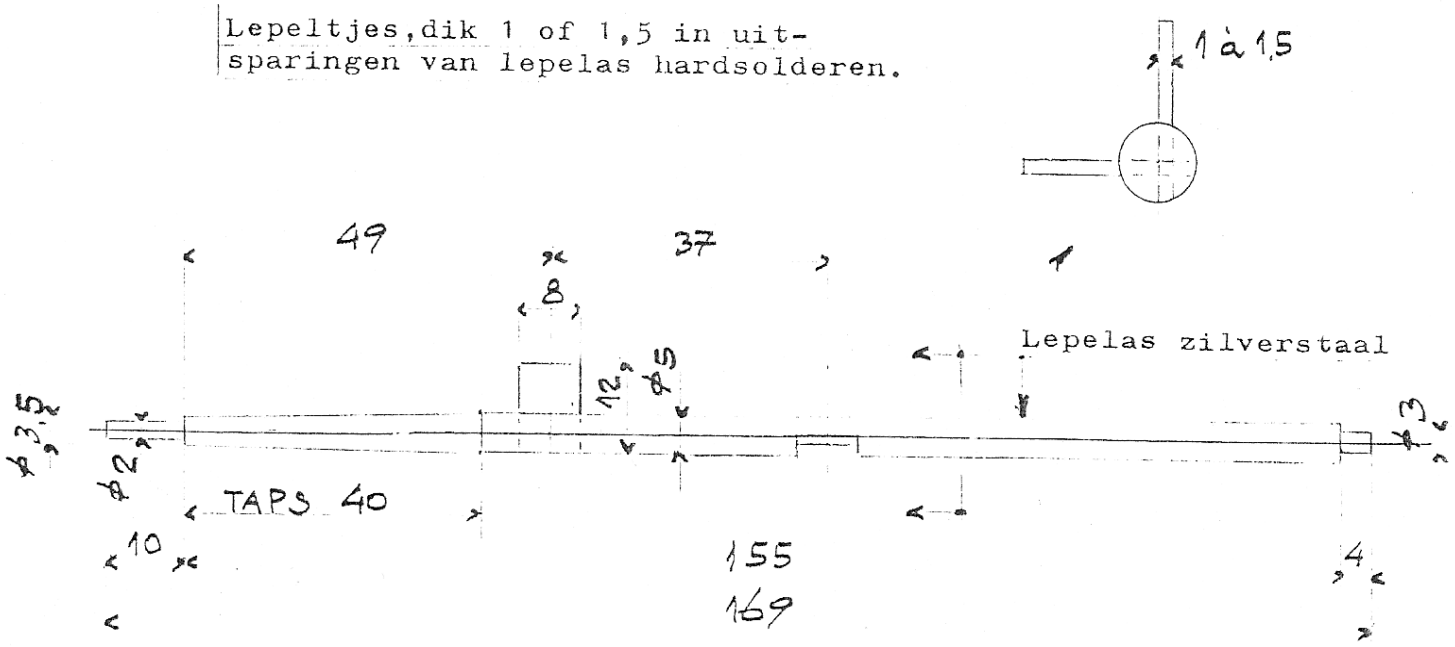
Bestelnr. Hobbyklok 081974

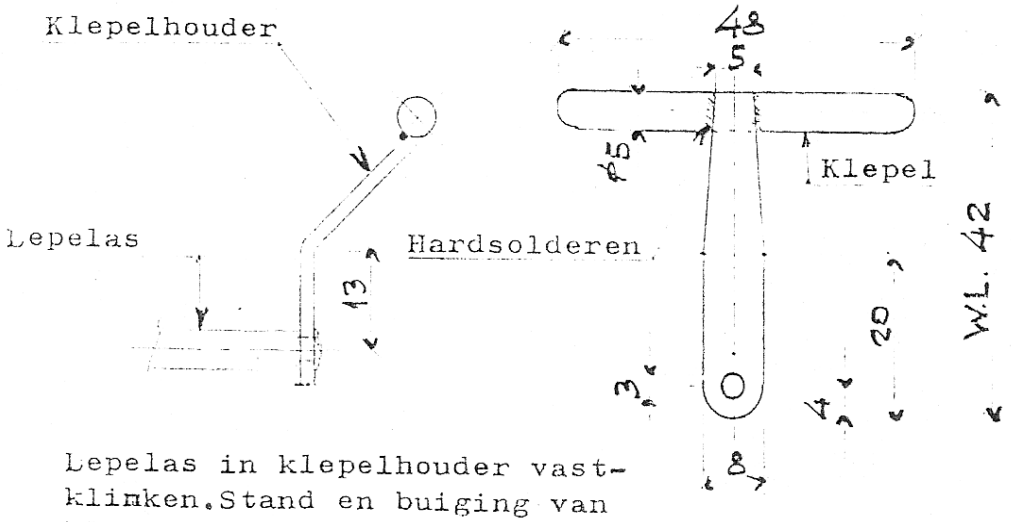
Ketting voor wekker.
Steek 11,6
Breedte 4,3
Dikte 1,05
Bestelnr. Hobbyklok 081987

Meidenklok.



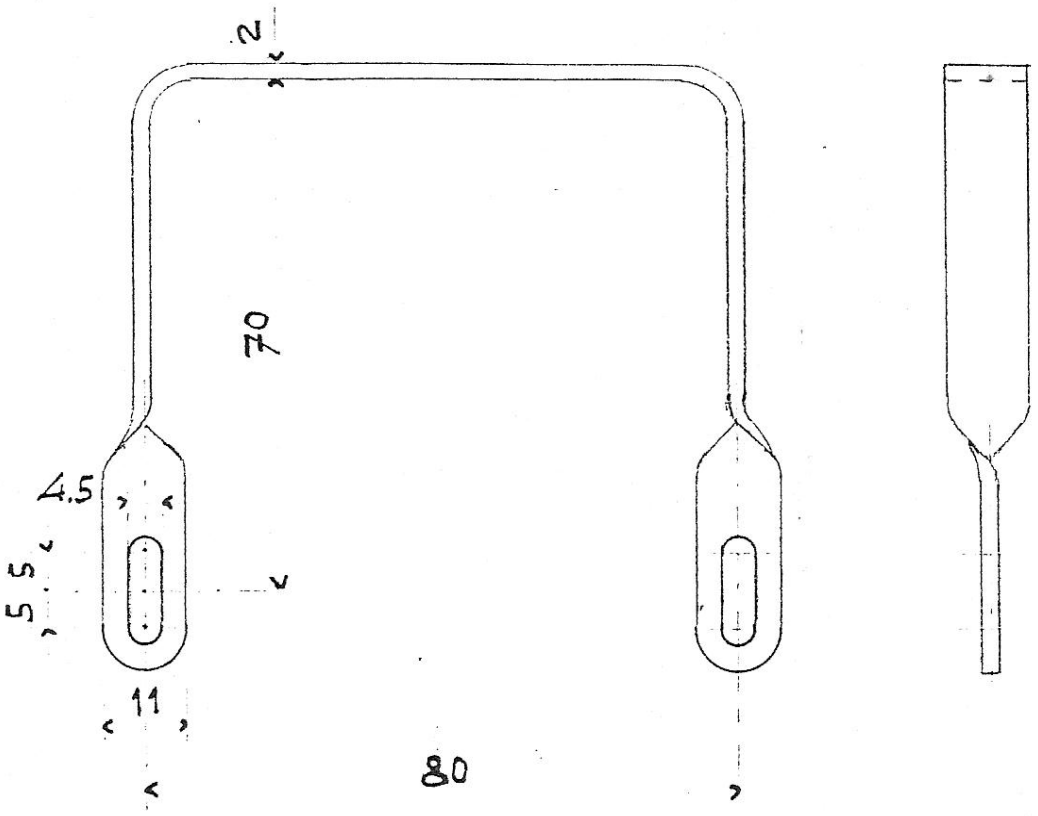
Lepeltjes, dik 1 of 1,5 in uitsparingen van lepelas hardsolderen.

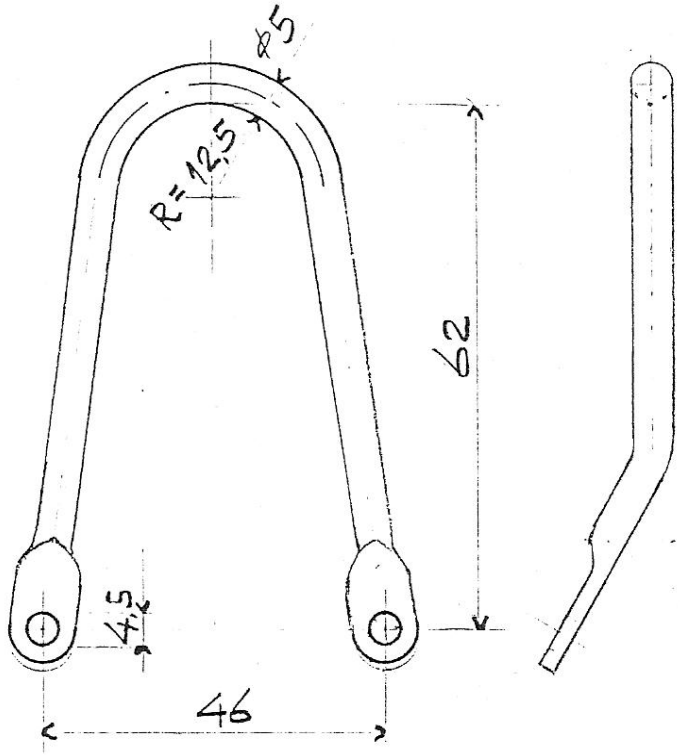




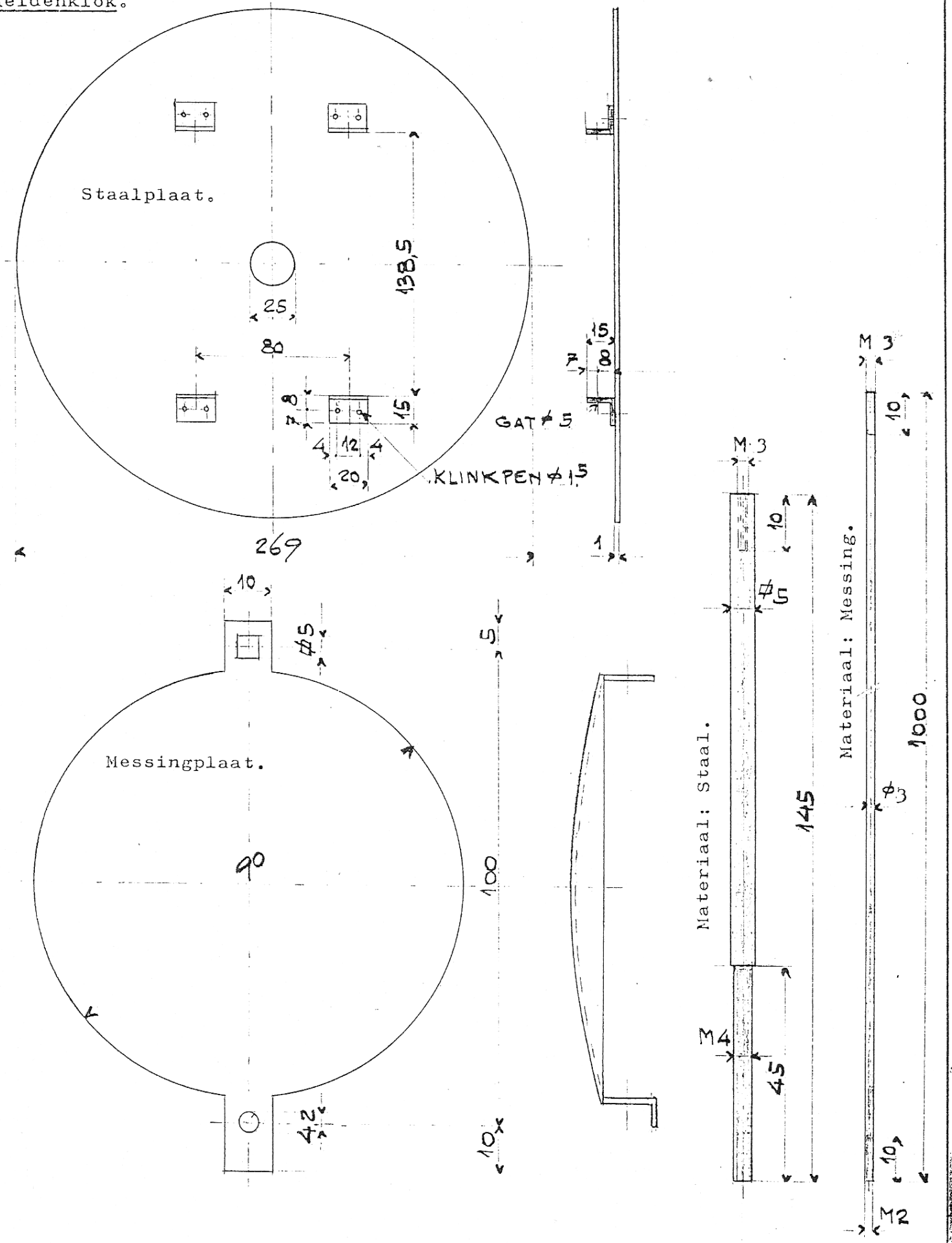
Lepelas in klepelhouder vastklinken. Stand en buiging van klepelhouder bij montage bepalen.

Meidenklok.

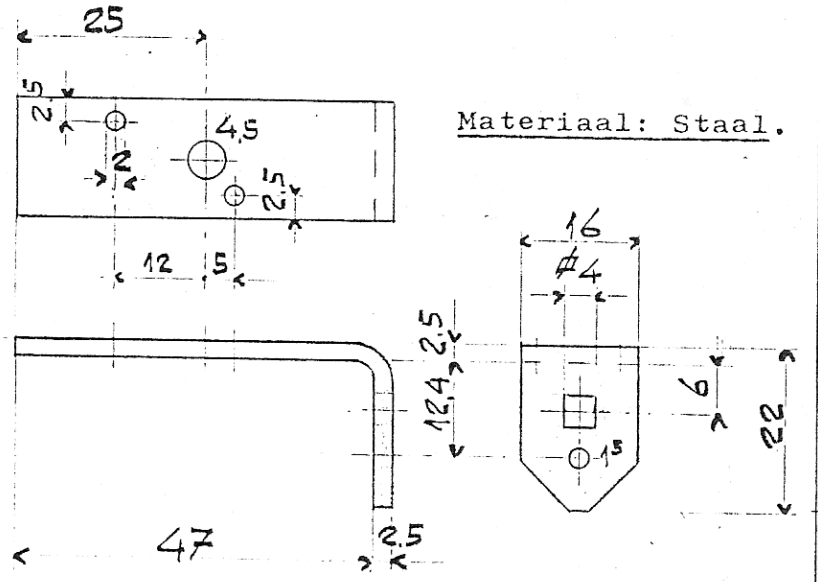




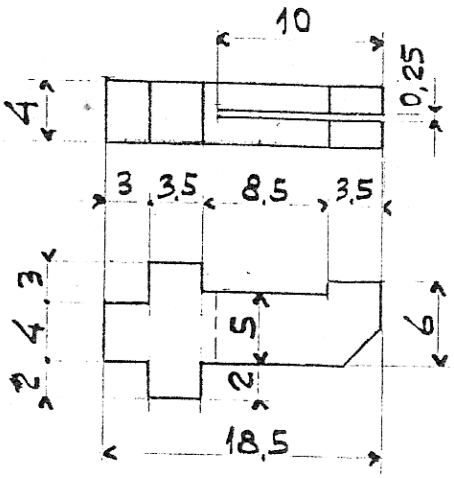
Meidenklok.


Staalplaat.
138,5
25
80
8
15
4
12
4
20
GAT Ø 5
KLINKPEN Ø 1,5
269
15
8
1
Messingplaat.
10
Ø5
90
42
5
100
10
M 3
10
Ø5
145
Materiaal: Staal.
M4
45
M 3
10
1000
Ø3
Materiaal: Messing.
10
M2

Meidenklok.

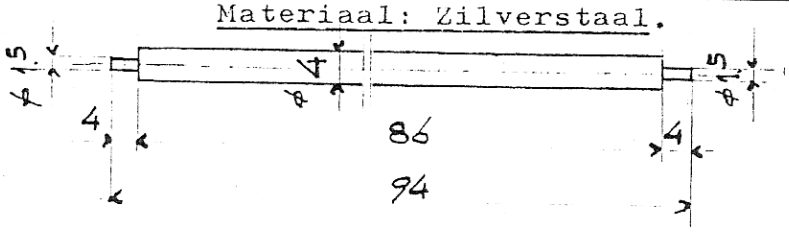


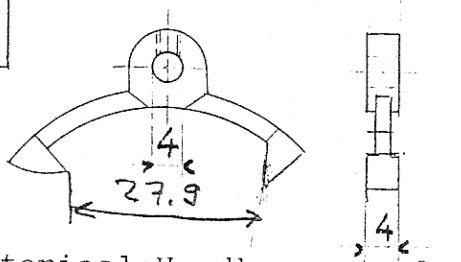
Materiaal: Staal.



Materiaal: Messing.

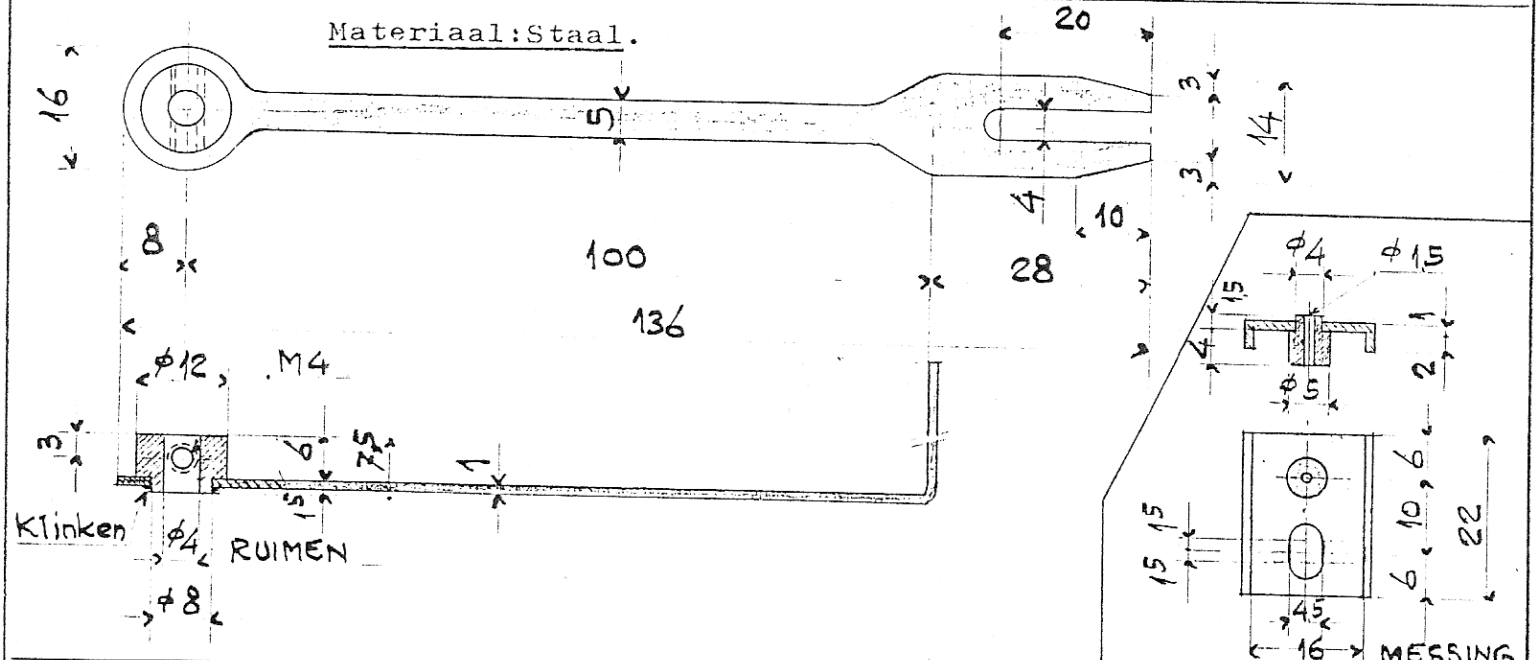
Materiaal: Zilverstaal.

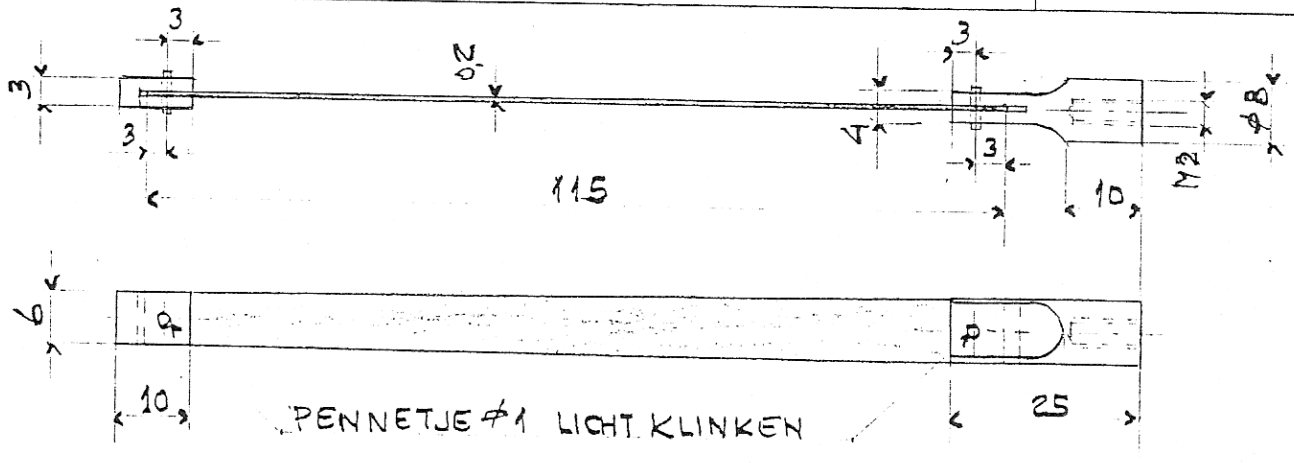




Materiaal:Hardbaar staal.

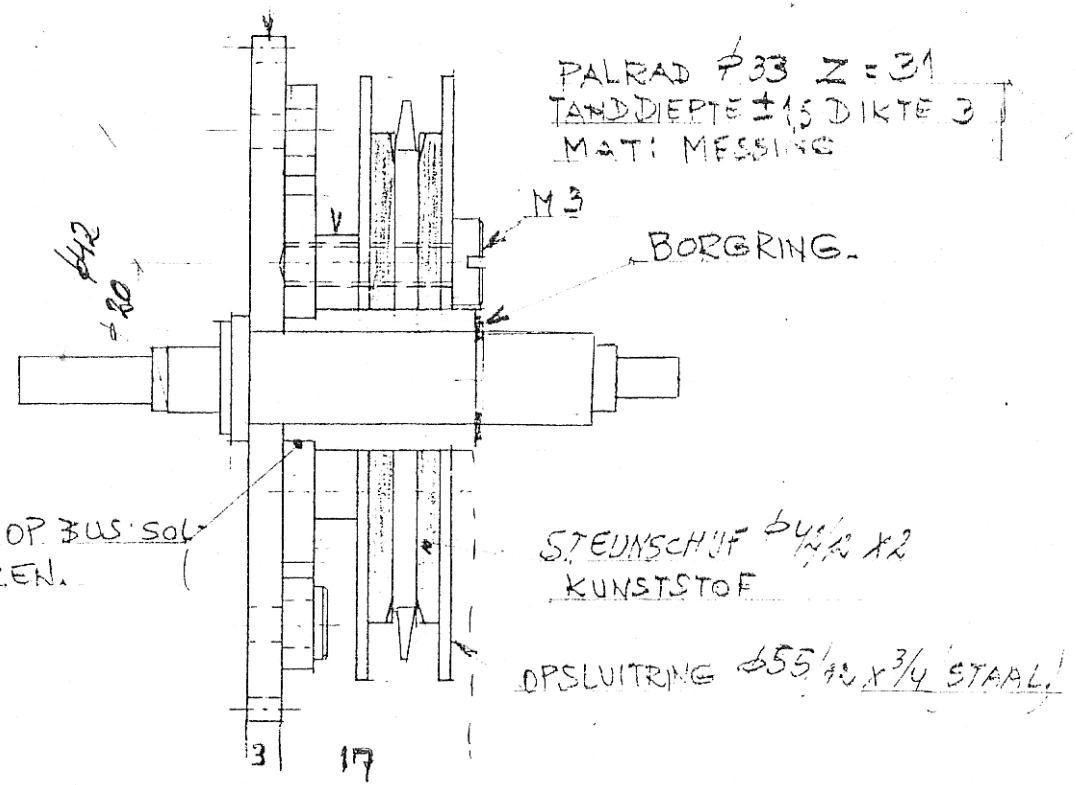
Materiaal:Staal.

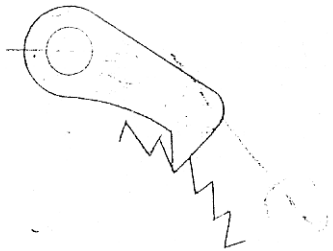


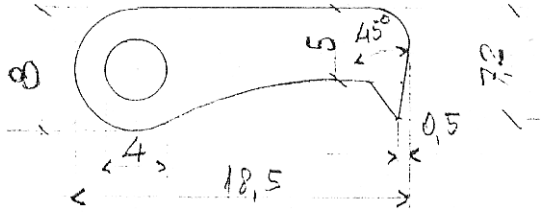


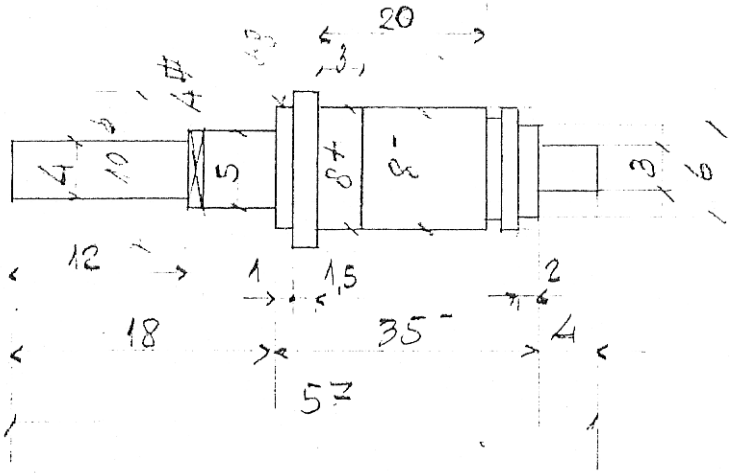
Materiaal: Fosforbrons dik 0,2
Eindstukken uit messing.

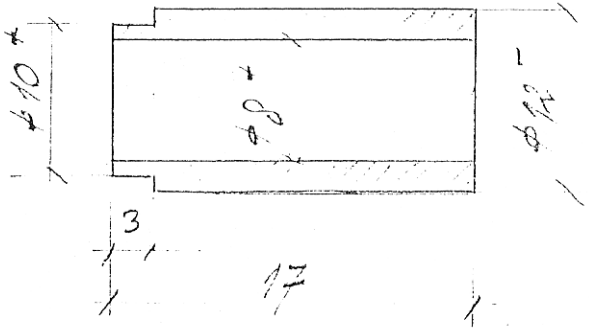
GRONDRAD. AFSTANDSRING ⌀27/12 dik 3. KUNSTSTOF

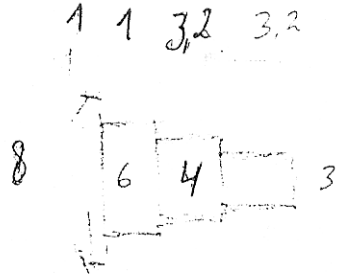


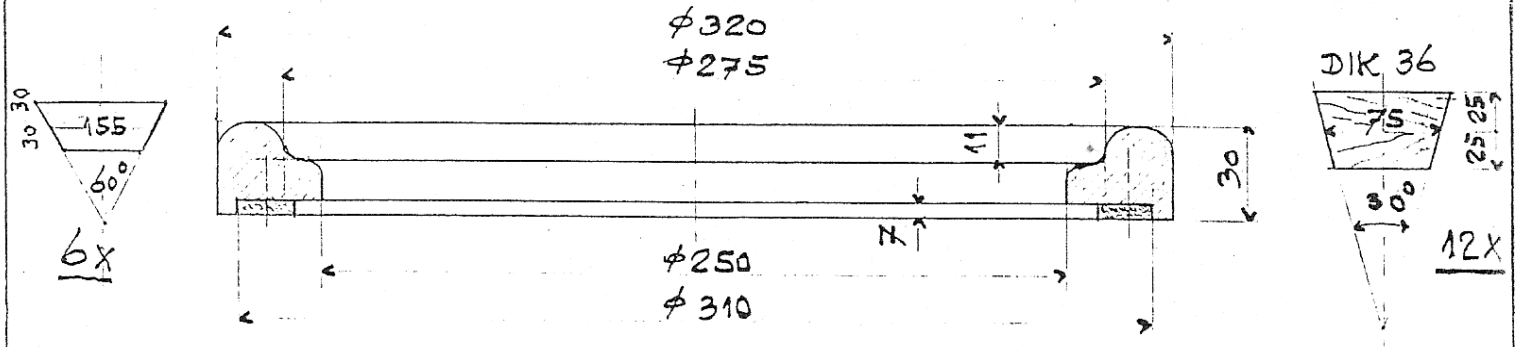












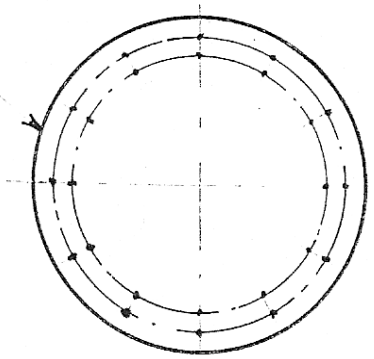
Bewerkingsvolgorde van houten wijzerplaatring van Luikse Meidenklok.

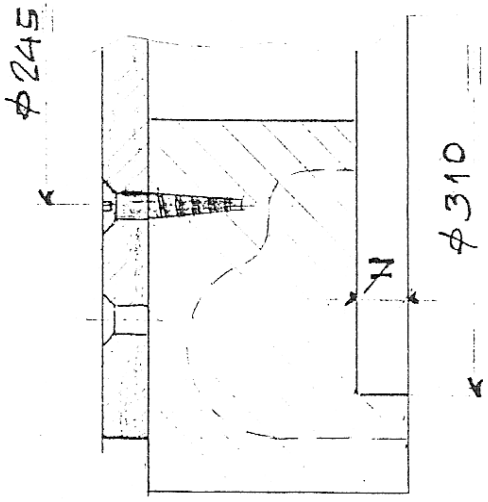
Om de houten wijzerplaatring te kunnen maken, moeten we de beschikking hebben over:

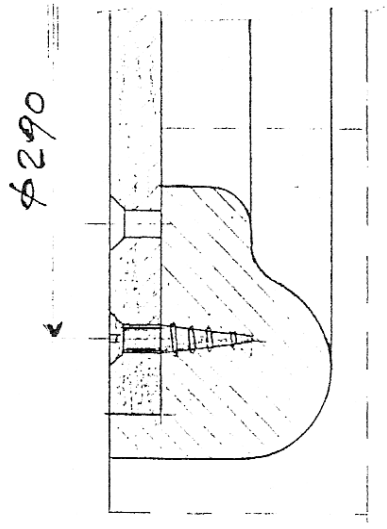
A. Een ring van aan elkaar gelijmde blokjes van de gewenste houtsoort met zodanige afmetingen dat daaruit de wijzerplaatring gedraaid kan worden. Boven rechts is een blokje getekend dat 12 maal aan elkaar gelijmd een dergelijke ringvorm oplevert. Evengoed kan, afhankelijk van de afmetingen van het ter beschikking staande hout, een ring uit elk gewenst aantal parten bestaan.

B. Een schijf multiplex van 6 mm. dik en een uitwendige diameter van ± 320. Trek hierop twee steekcirkels resp. 245 en 290 Ø. Boor op elke steekcirkel 12 gaten van 3 mm.

C. 12 houtschroeven Ø6 x 19 met platte kop.







1e Bewerking.

Schroef de multiplexschijf met 12 houtschroeven zo centrisch mogelijk op de wijzerplaatring. Gebruik de schroefgaten van steekcirkel Ø 245. Schroef nu de multiplexschijf (mp-schijf) met een viertal houtschroeven vast op een in de draaibank gespannen houten steunschijf. Draai de sponning Ø 310 en vlak de voorkant.

2e Bewerking.

Haal de mp-schijf van steunschijf, demonteer de wijzerplaatring (wp-ring) en span de mp-schijf weer op de steunschijf. Draai de mp-schijf nu uitwendig Ø 310, passend in de gedraaide sponning van de wp-ring.

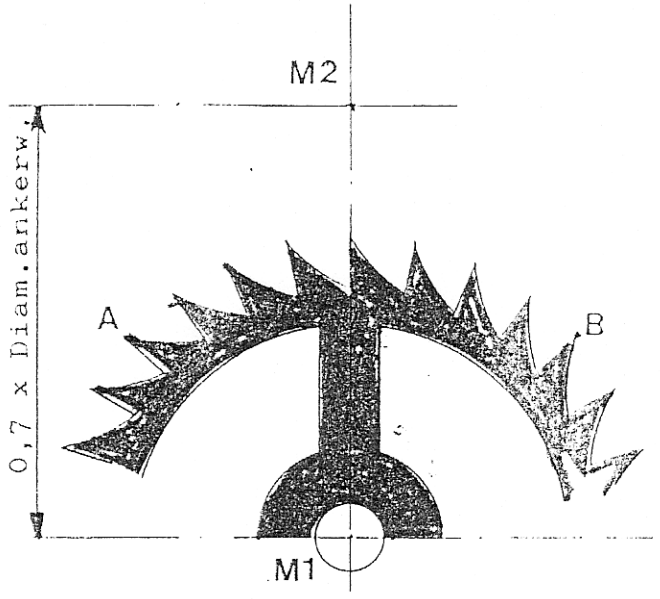
3e Bewerking.

Schroef mp-schijf met 12 houtschroeven op steekcirkel Ø 290 vast in de sponning. Schroef het geheel weer op de steunschijf en draai de wp-ring in profiel volgens de maten op de tekening. Schuur de ring glad. Bedenk dat de ring hierna NIET meer gesp annen kan worden.

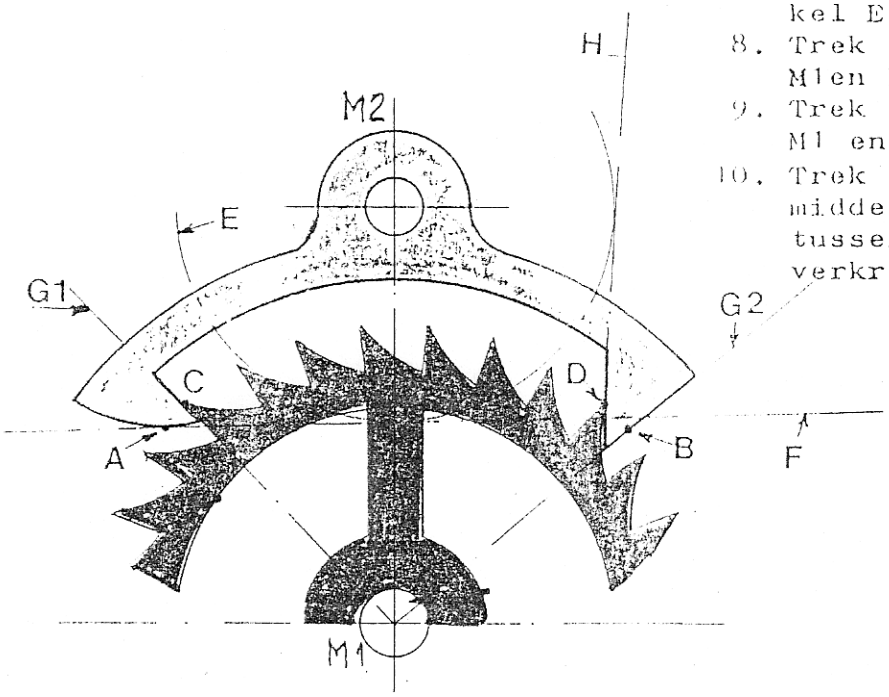
4e Bewerking.

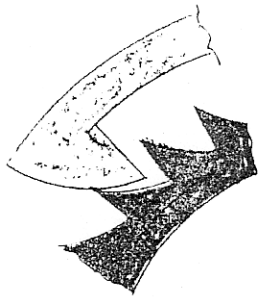
Demonteer het geheel en schroef de mp-ring weer op de steunschijf. Bewerk de ring nu zo dat er een inwendige diameter van Ø 270 ontstaat.

Constructie van een anker voor een ankerwiel met terugwerkende ankergang.



1. Trek een vertikale lijn en zet daarop de afstand M1-M2 af die gelijk is aan 0,7xbuitendiameter van het ankerwiel.
2. Leg het ankerwiel op de vertikale lijn vlg. bovenste tekening
3. Tel naar links en rechts vier tanden en zet punt A resp.punt B
4. Verdraai nu het ankerwiel een weinig LINKSOM precies de helft van de ruimte tussen twee tanden De top van de vierde tand, recht om geteld, markeren we met de letter D. De top van de vierde tand, linksom geteld, markeren we met de letter C.
5. Trek nu een lijn F door punt A en het midden tussen de punten D en B.
6. Trek een cirkel E met het middel punt in M2 en rakend aan lijn F.
7. Trek nu een raaklijn H aan cirkel E door punt D.
8. Trek lijn G2 door de punten M1en B.
9. Trek lijn G1 door de punten M1 en C.
10. Trek twee cirkelbogen met M1 als middelpunt om een verbinding tussen de twee ankerbekken te verkrijgen.





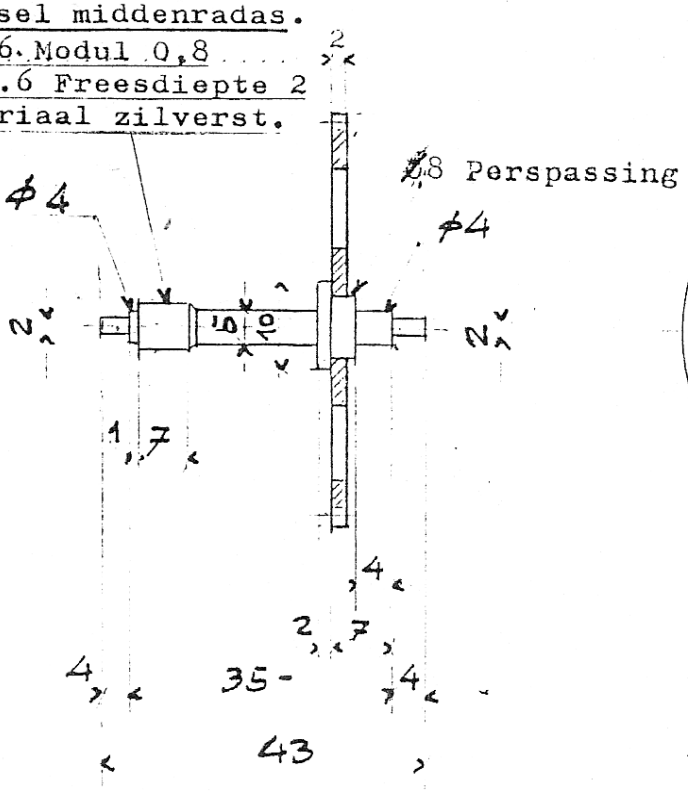
Figuur 1.

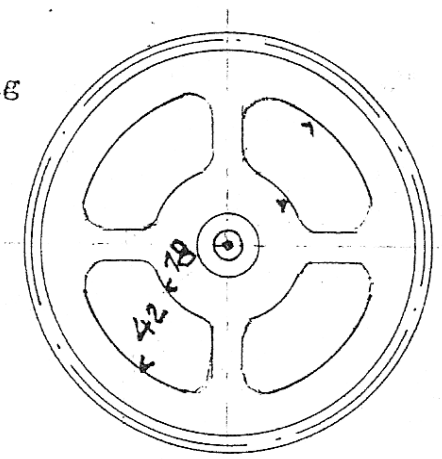
Na deze constructie hebben we een anker waarvan de bekken te groot zijn. Eerst wordt de inkomende ankerbekpunt aan de kant van lijn F enigszins rond gemaakt. Zie figuur 1.

Om het anker verder goed werkend te maken, zo, dat het acht tanden omsluit, vijlen we steeds van elke ankerbek evenveel af en wel aan de zijde van de afvallende tand. Dus niet meer aan de werkvlakken vijlen. Probeer na elke paar vijlstreken aan beide bekken of het anker goed loopt op het ankerwiel. Is dit het geval, dan worden de werkvlakken gepolijst en dé bekken gehard.

Meidenklok.

Rondsel middenradas.
Z = 6. Modul 0,8
Kopc.6 Freesdiepte 2
Materiaal zilverst.





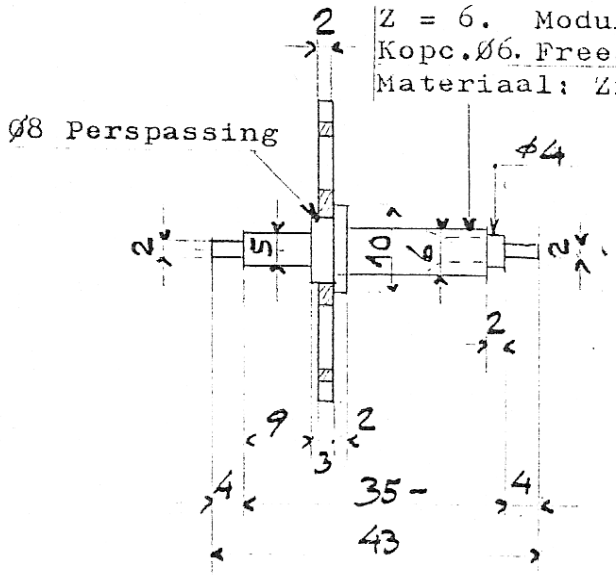
Middenrad.

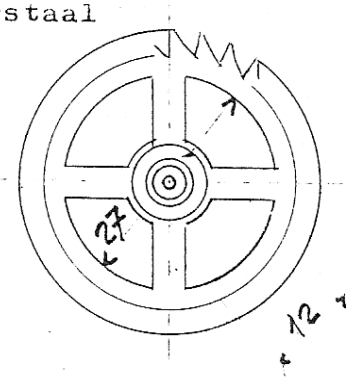
Z = 64
Modul 0,8
Kopcirkel 53,3
Freesdiepte2,3
Mater. messing
Dik 2

As lengte I 70mm

Rondsel ankerradas

Z = 6. Modul 0,8
Kopc.Ø6. Freesdiepte 2
Materiaal: Zilverstaal



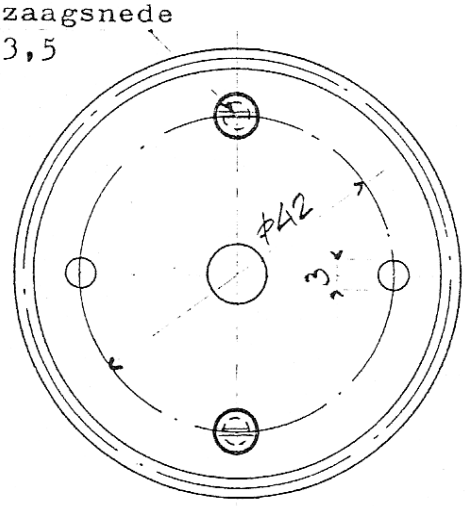


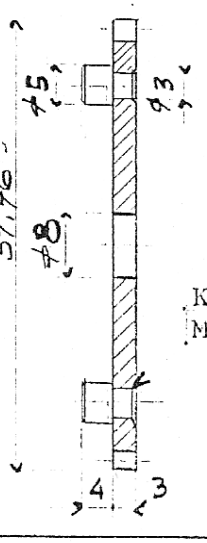
Ankerrad.

Z = 30
Kopcirkel 40,2
Freesdiepte 3
Materiaal: messing
Dikte 2

As lengte I 70mm

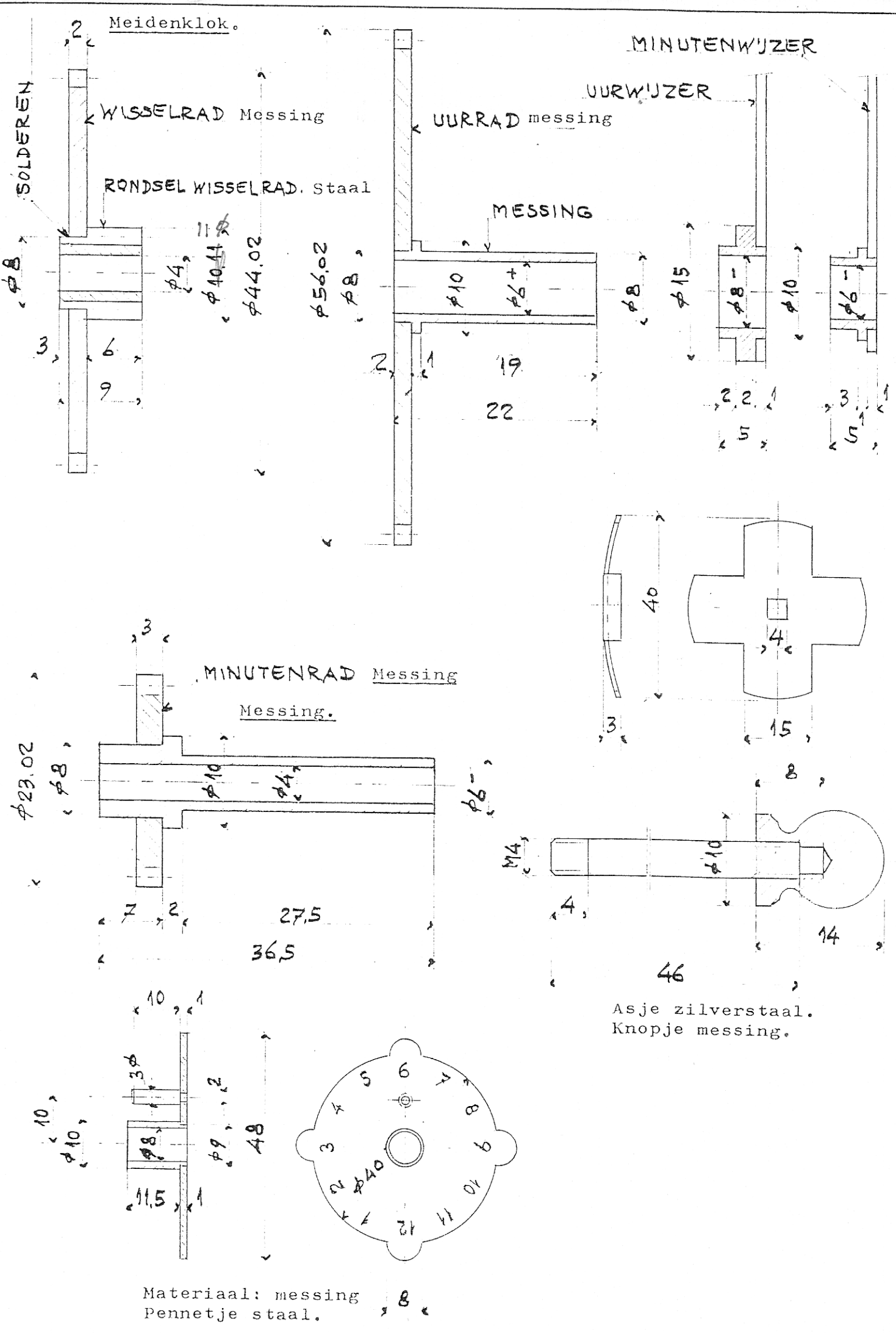
Figuurzaagsnede
Diep 3,5



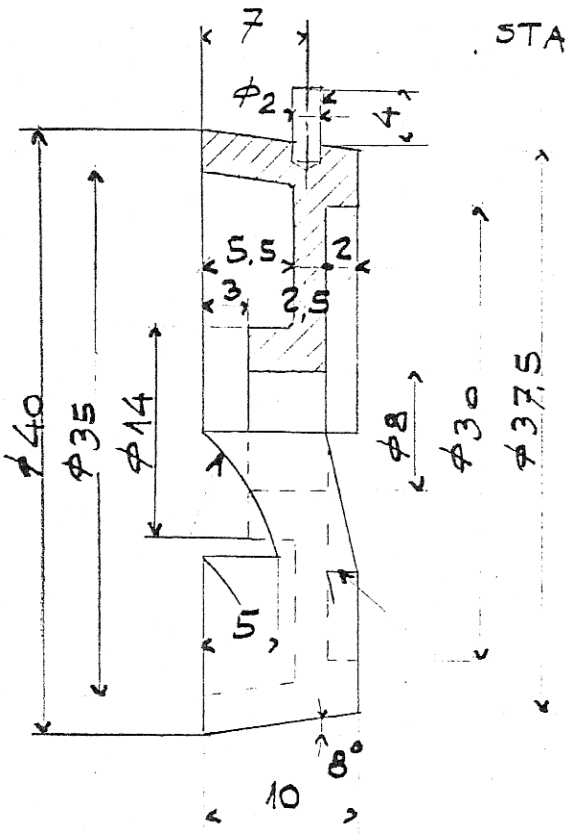


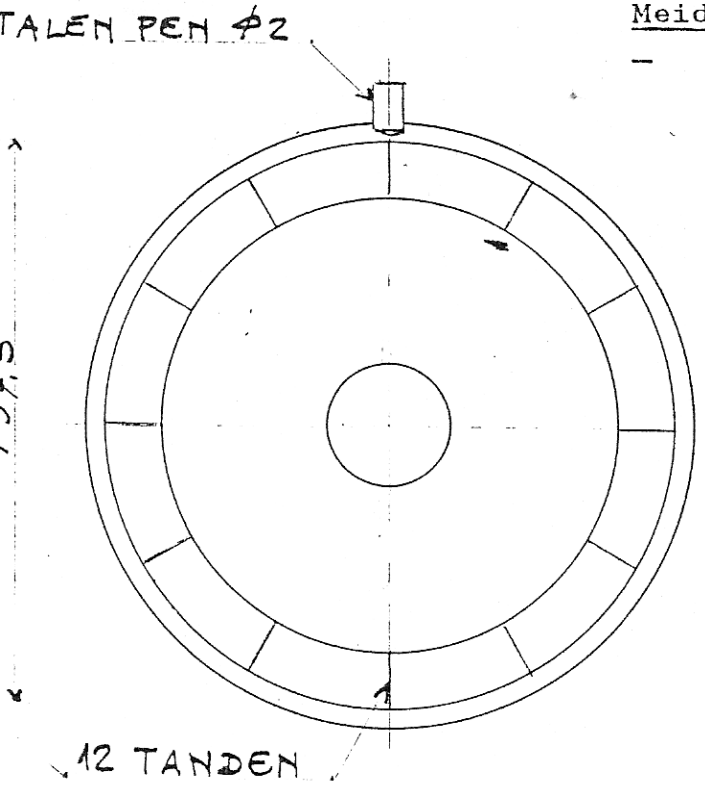
Grondrad.

Z = 72
Modul 0,8
Kopcirkel 59,76
Freesdiepte 2,32
Materiaal messing


Meidenklok.
SOLDEREN
WISSELRAD Messing
RONDSEL WISSELRAD. Staal
UURRAD messing
MESSING
MINUTENWIJZER
UURWIJZER
MINUTENRAD Messing
Messing.
Asje zilverstaal.
Knopje messing.
Materiaal: messing
Pennetje staal.

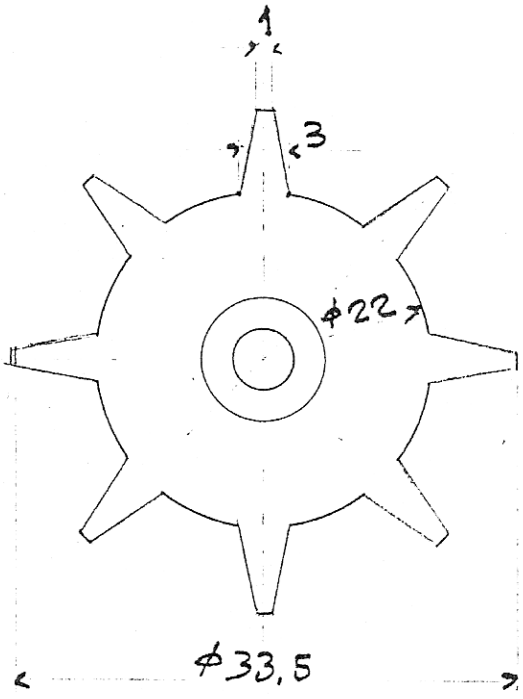
Meidenklok.

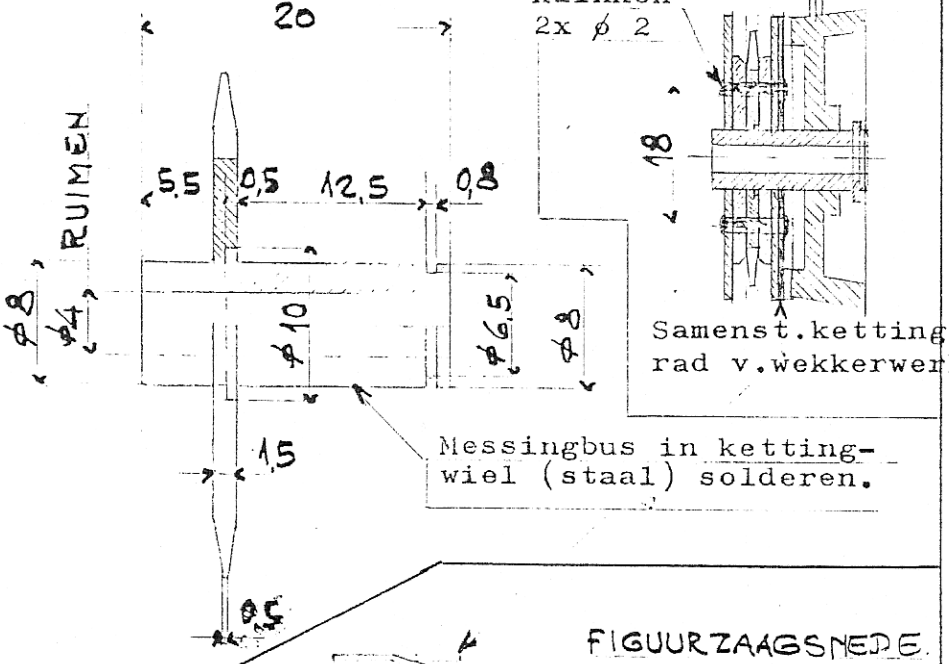


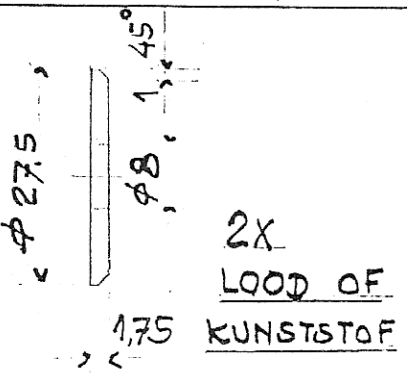


15 TANDEN.

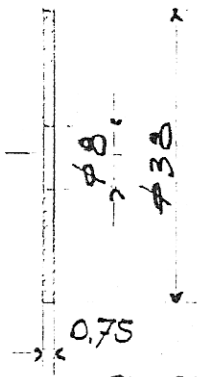
PALWIEL. MAT. MESSING.





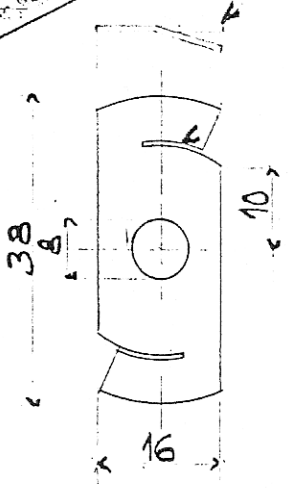


2X LOOD OF KUNSTSTOF



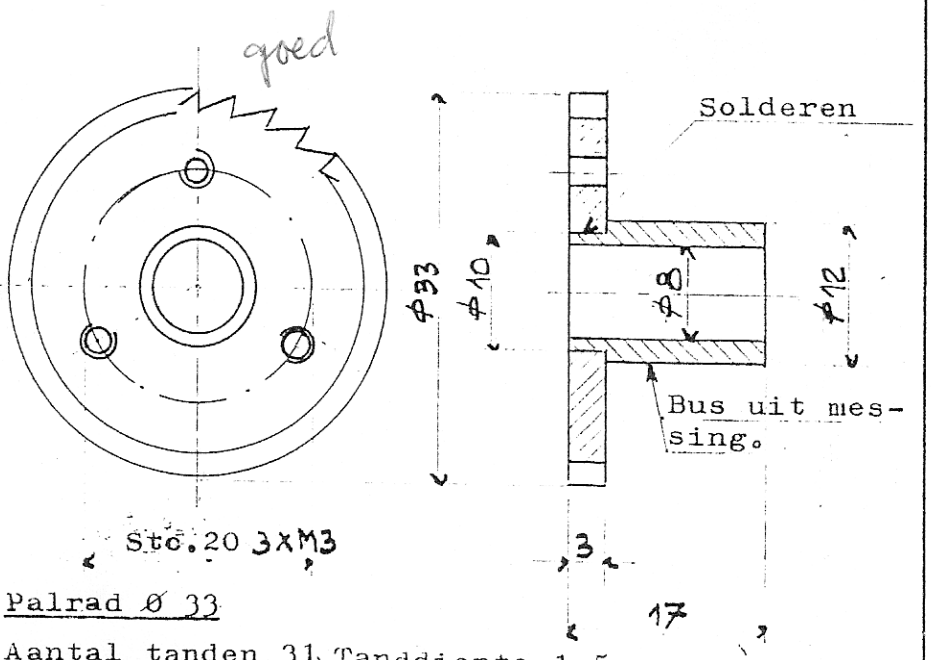
2X STAAL

FIGUURZAAGSNEDE.



Materiaal fosforbrons. Dik 0,5 mm. Lipjes omhoog buigen zodat ze verend achter de tanden van het palwiel haken.

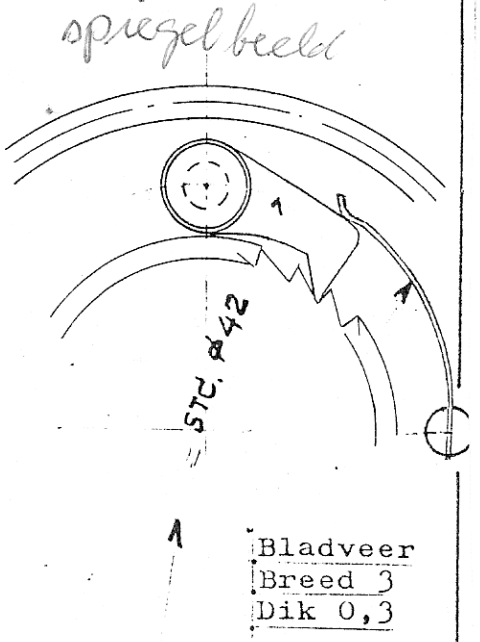
Meidenklok.



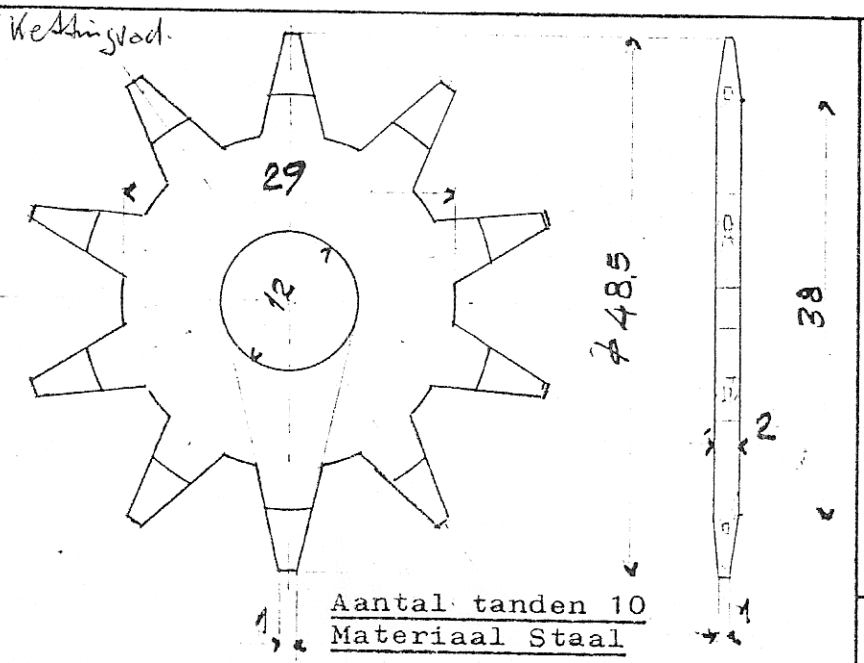
Palrad Ø 33

Aantal tanden 31. Tanddiepte 1,5

Materiaal messing.

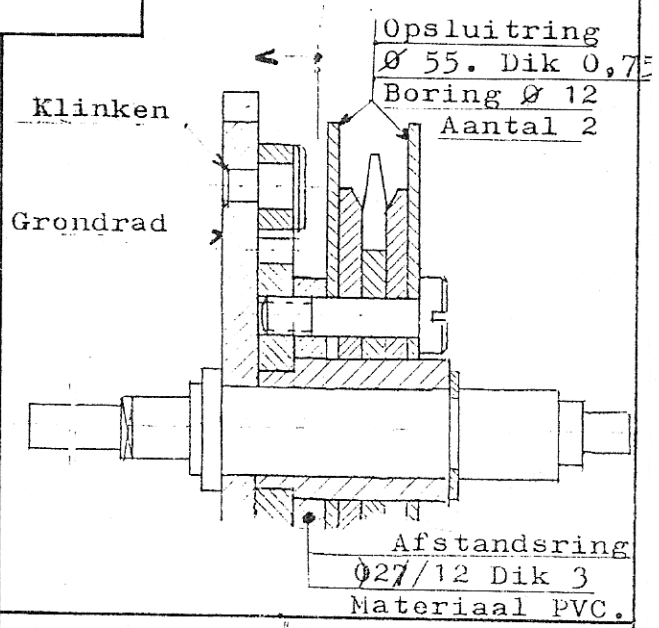


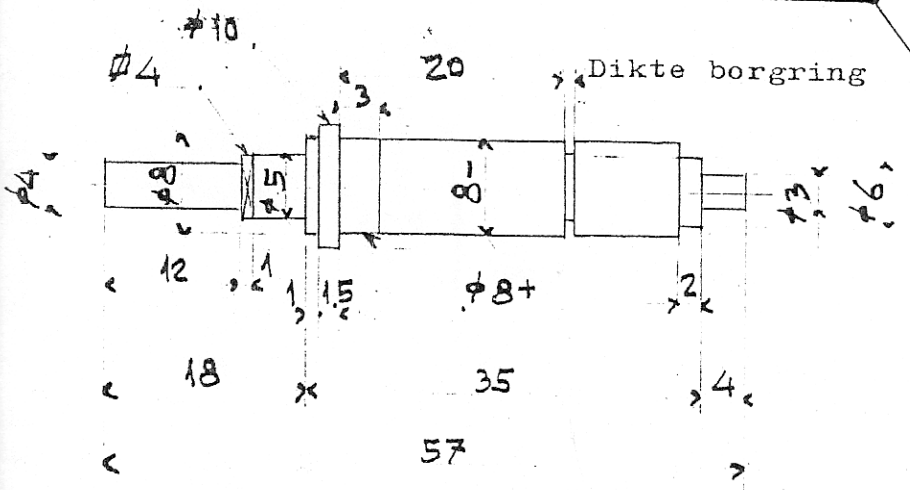
Bladveer
Breed 3
Dik 0,3



Aantal tanden 10

Materiaal Staal



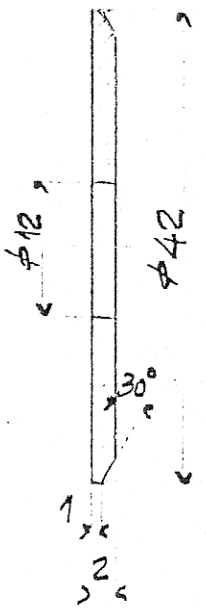


Aantal 1 Materiaal zilverstaal.

As lengte t 90mm.

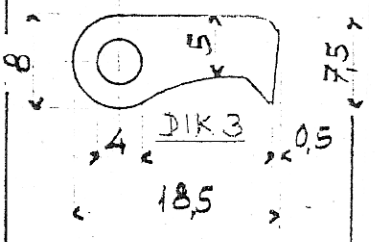
Aantal 2

Mat. P.V.C.



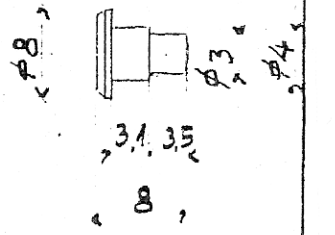
Aantal 2

Mat. messing

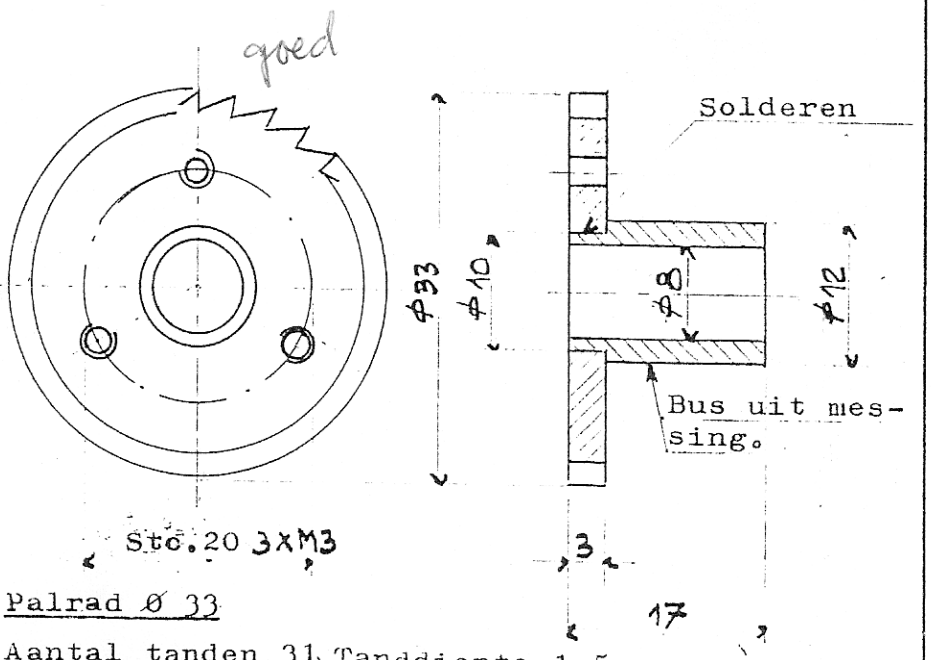


Aantal 2

Mat. Zilverstaal



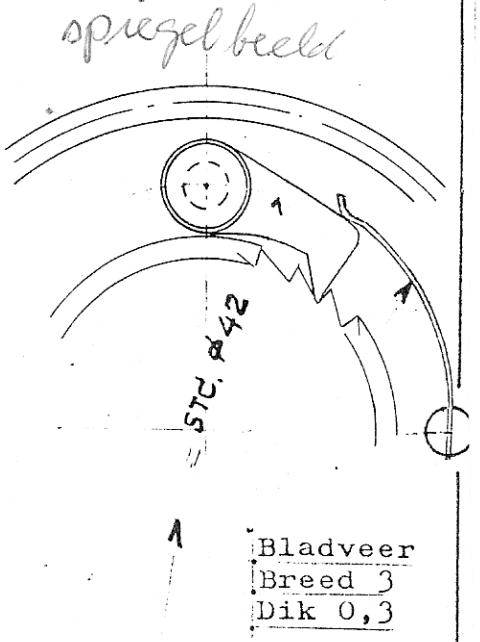
Meidenklok.



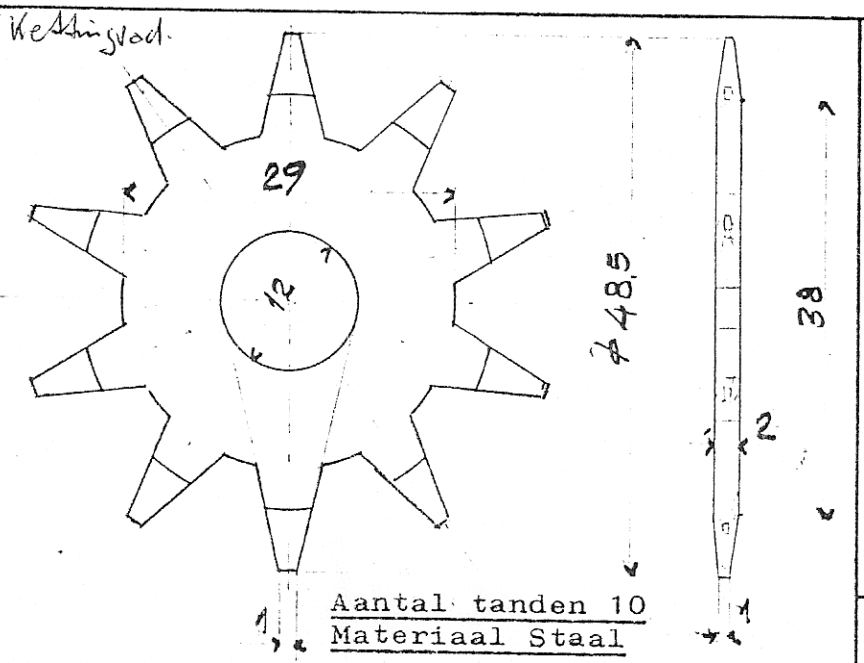
Palrad Ø 33

Aantal tanden 31. Tanddiepte 1,5

Materiaal messing.

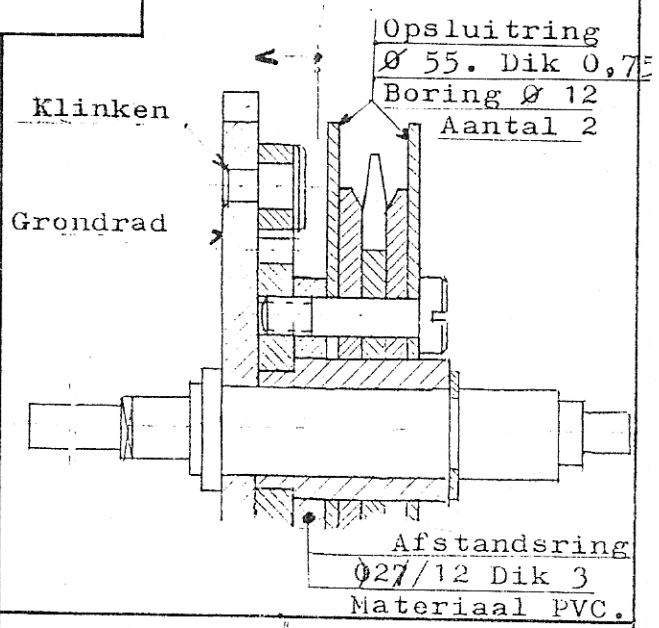


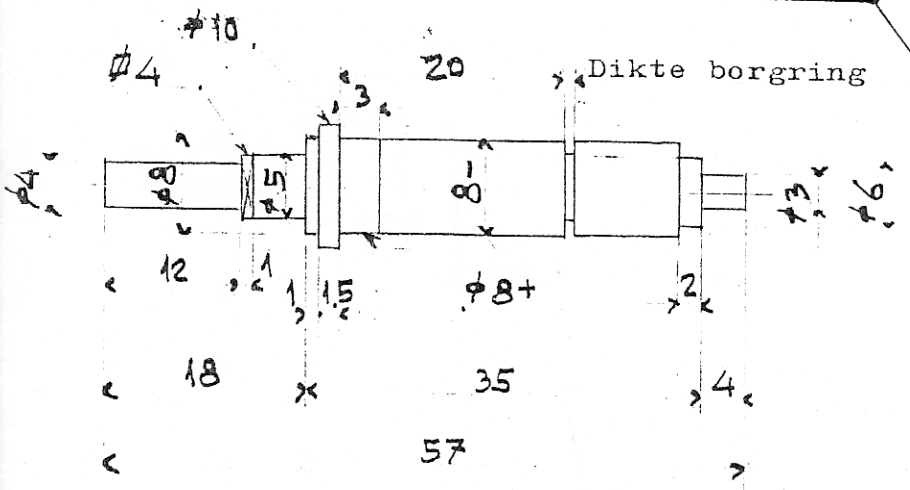
Bladveer
Breed 3
Dik 0,3



Aantal tanden 10

Materiaal Staal



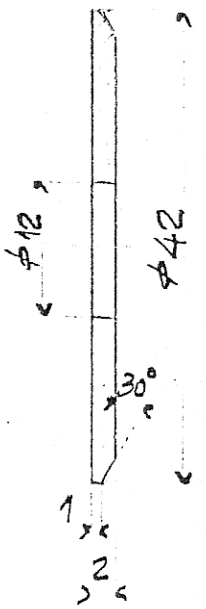


Aantal 1 Materiaal zilverstaal.

As lengte t 90mm.

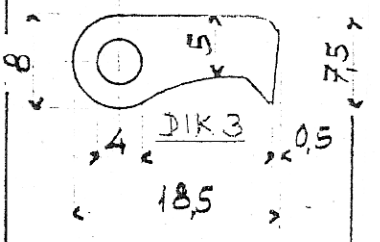
Aantal 2

Mat. P.V.C.



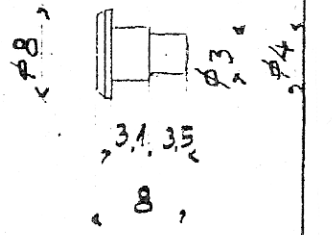
Aantal 2

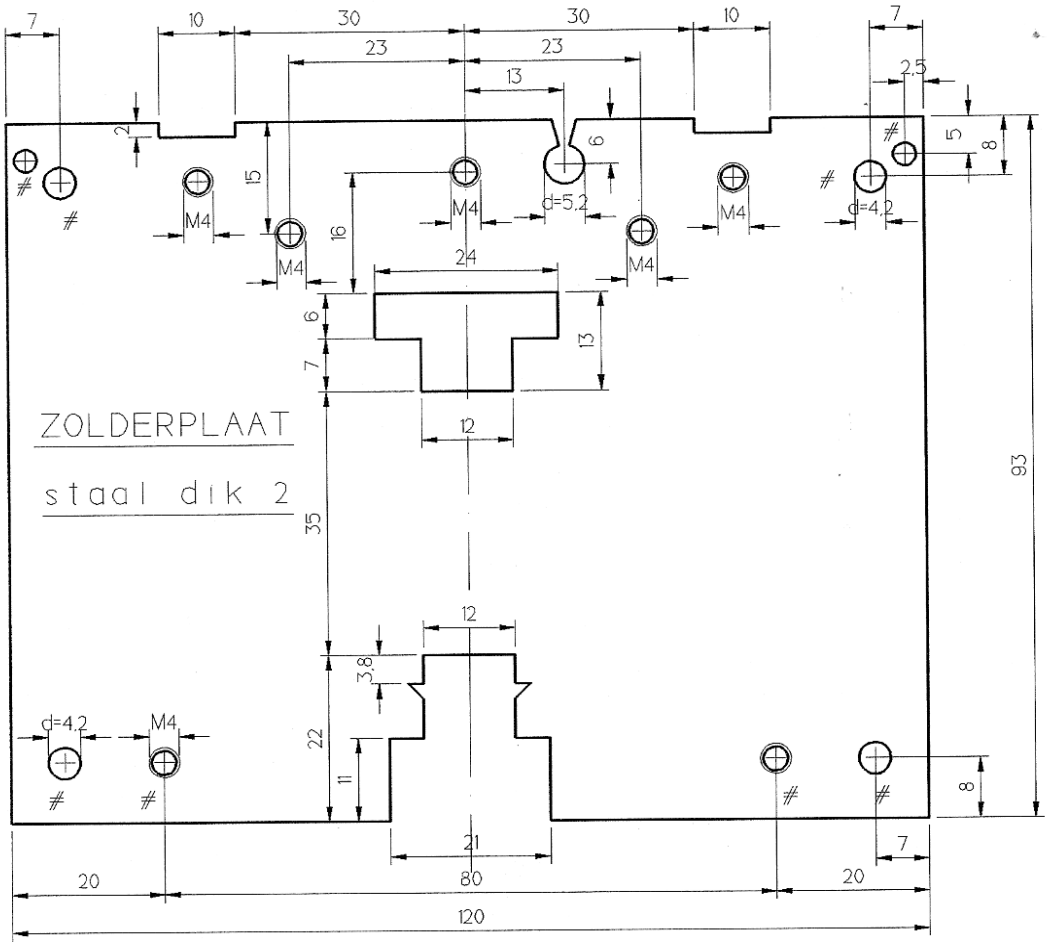
Mat. messing

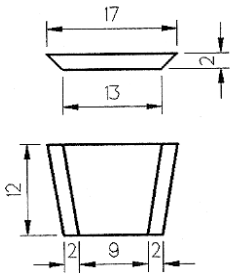


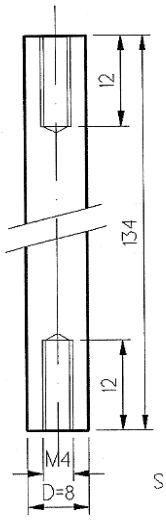
Aantal 2

Mat. Zilverstaal

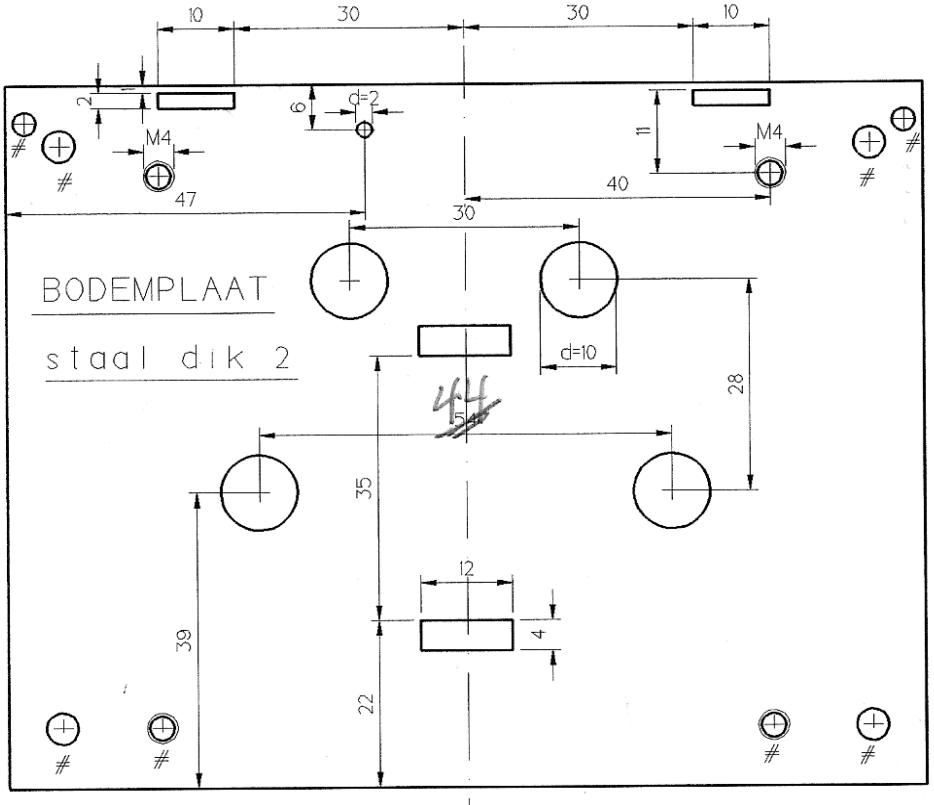




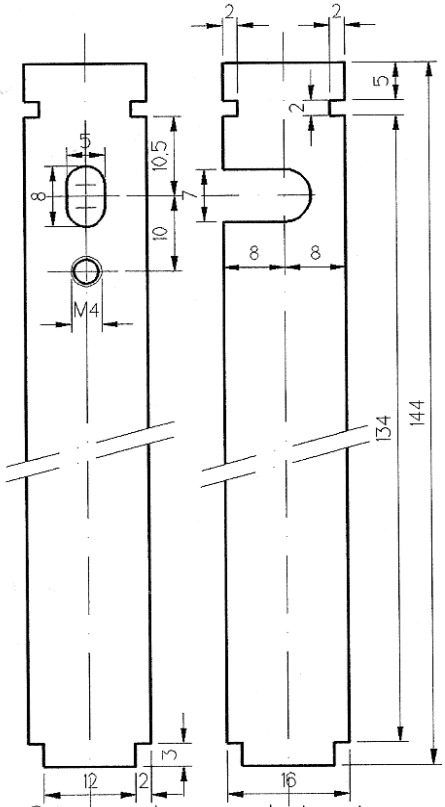




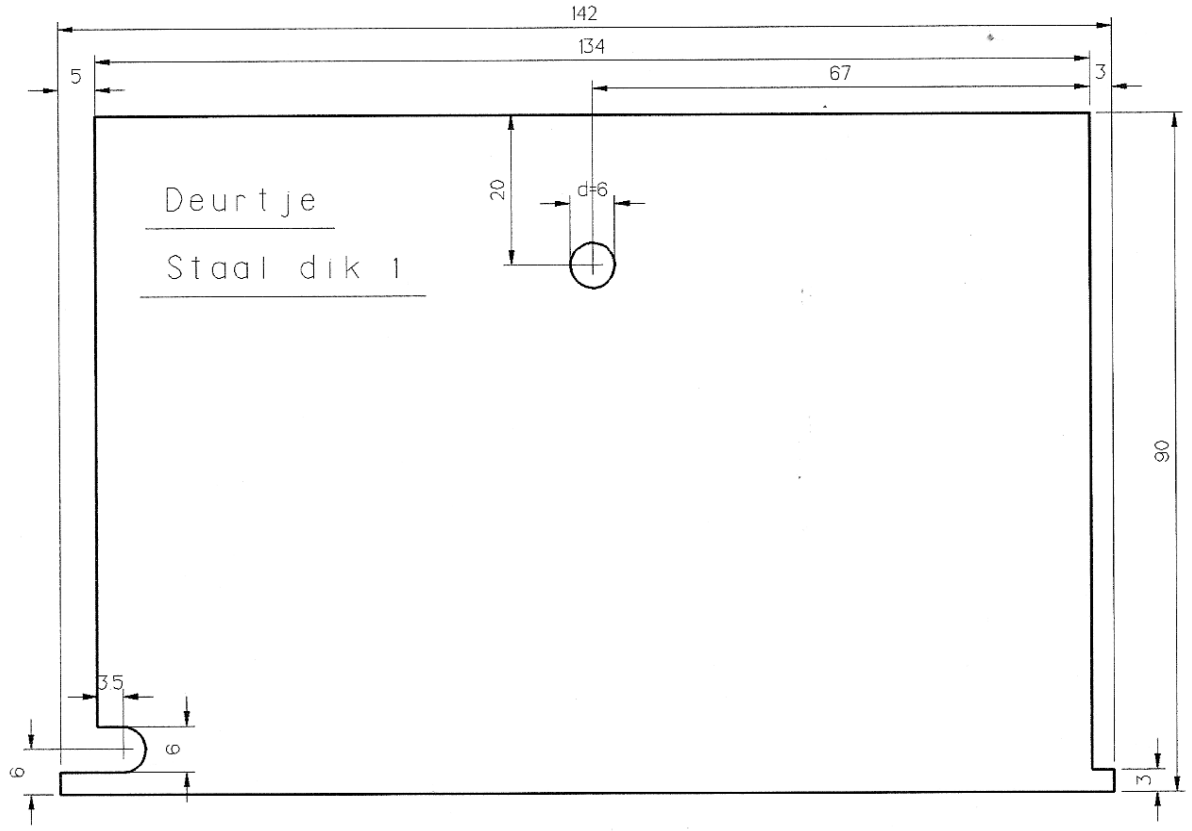
4x staal

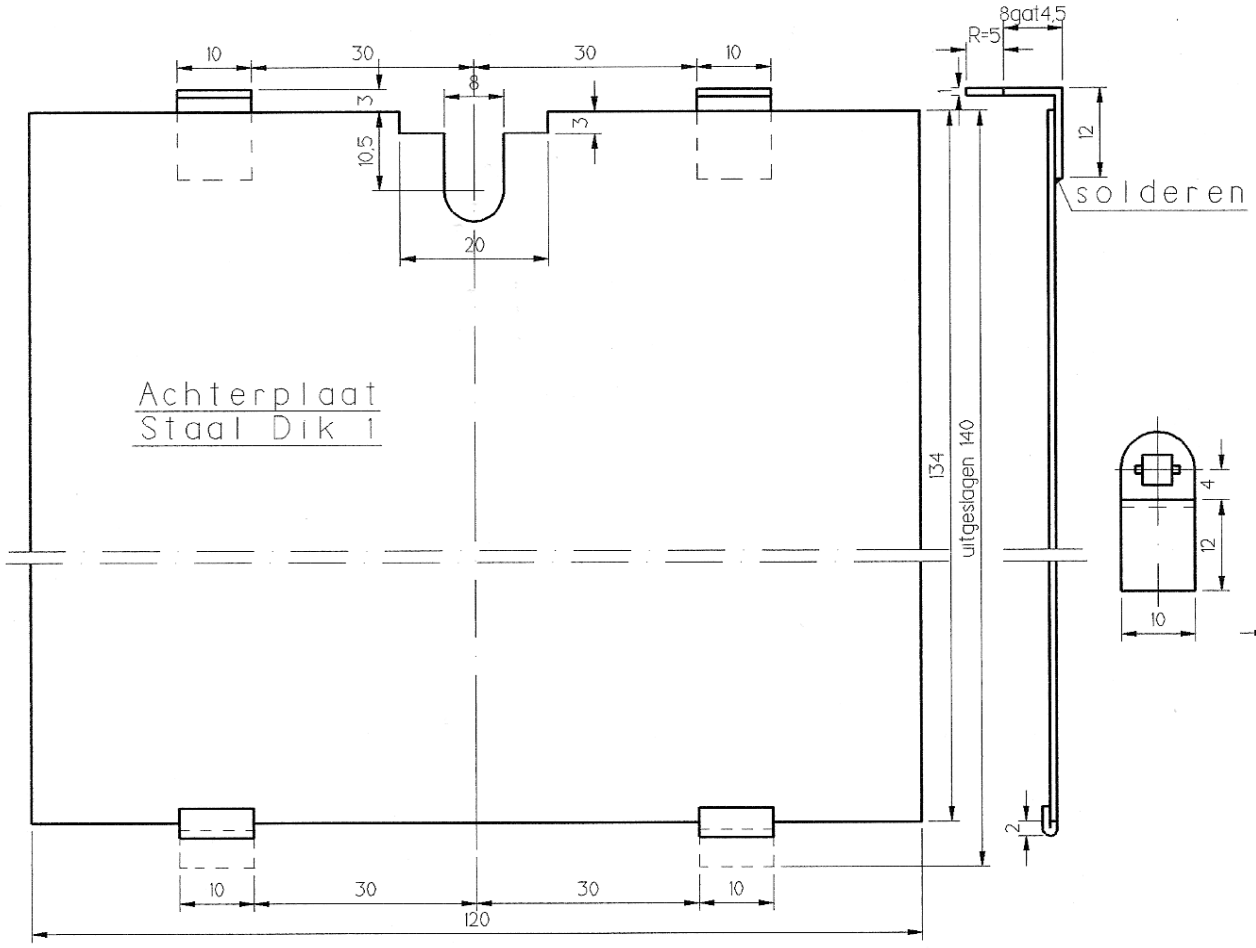


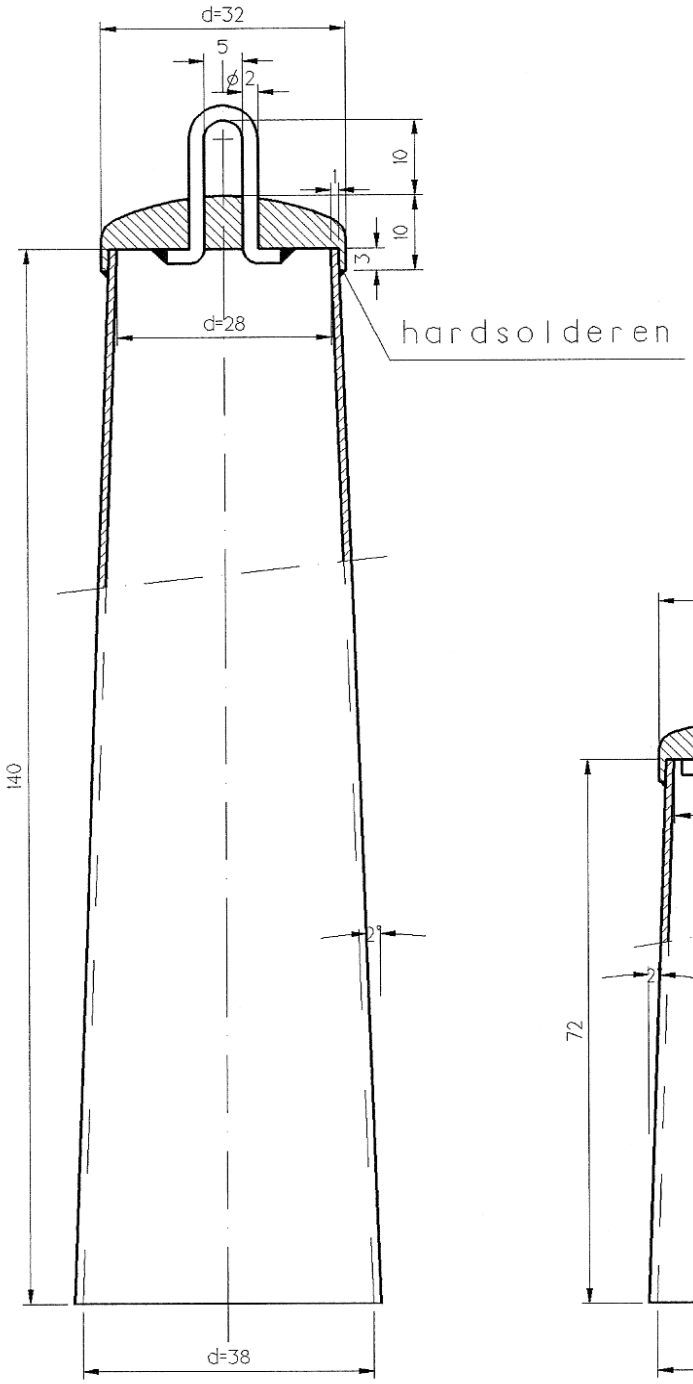
de met # gemerkte gaten in zolder- en bodemplaat SAMEN boren



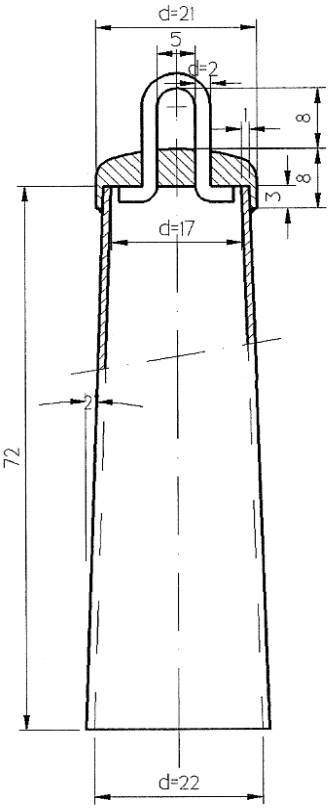
Staanders dik 4
Materiaal: messing


142
134
5
67
3
Deurtje
Staal dik 1
20
d=6
90
3,5
6
6
3

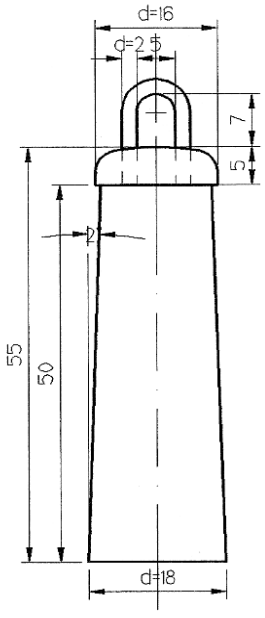

10
30
30
10
3
ø8
10,5
3
20
Achterplaat
Staal Dik 1
134
uitgeslagen 140
10
30
30
10
120
8gat4,5
R=5
1
12
solderen
2
4
12
10
6
12
1,2
3
ø4
d=10
d=6
8



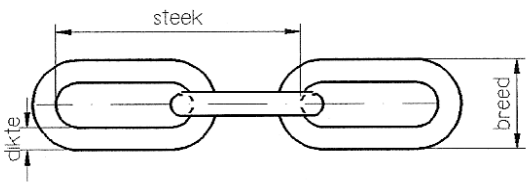
Gewicht voor loopwerk
Mantel messingplaat dik 1
Volgieten met lood
Totaalgewicht± 625 gram



Gewicht wekker
Mantel messingplaat dik 1
Volgieten met lood
Totaalgewicht ± 250 gram



Contragewicht wekker
Massief messing
Totaalgewicht ± 100 gram

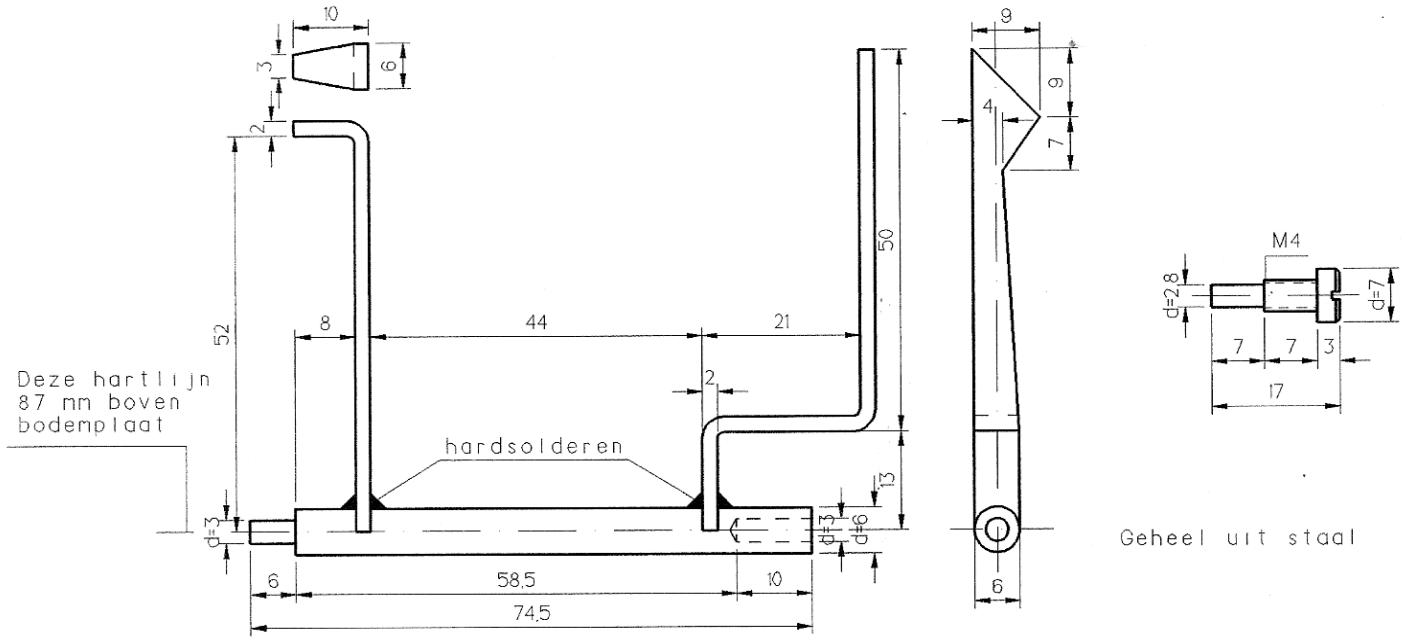


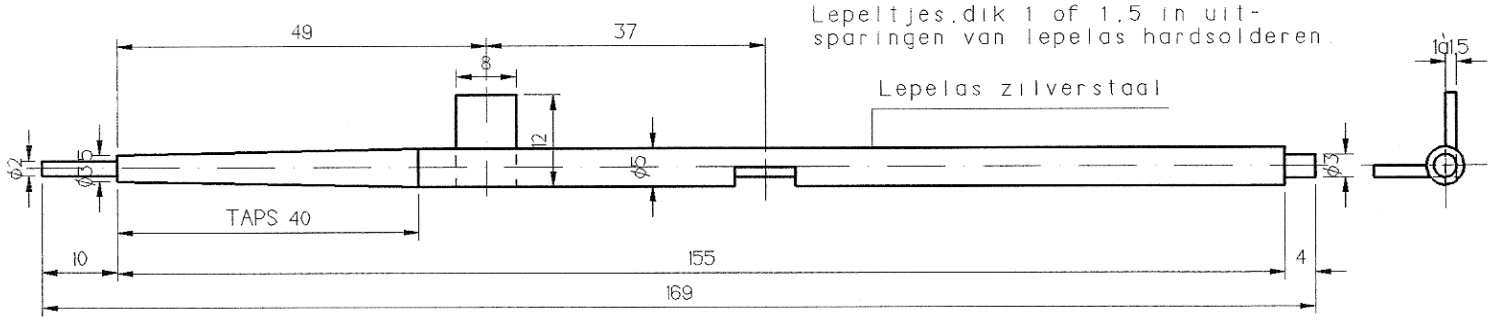
Ketting voor loopwerk.

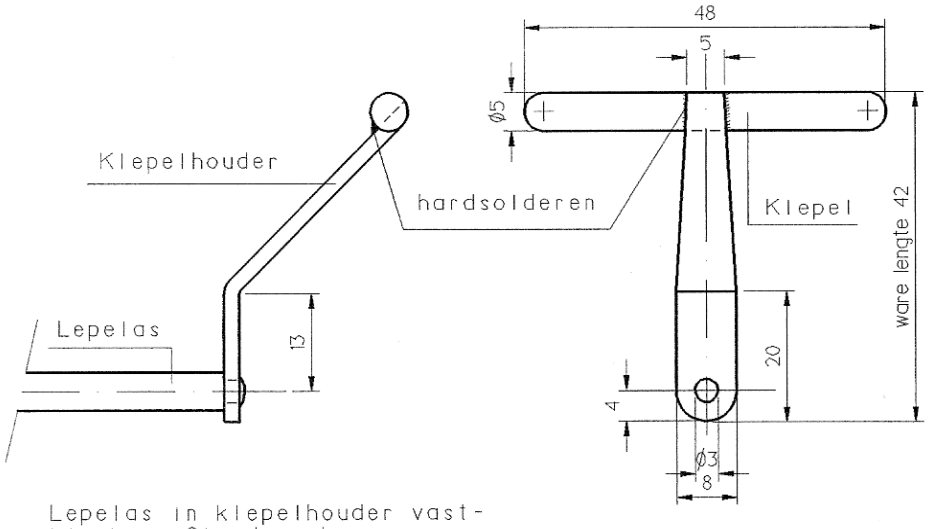
Steek:	13,8	Bestelnr. Hobbyklok
Breedte:	5,4	081974
Dikte:	1,5	

Ketting voor wekker.

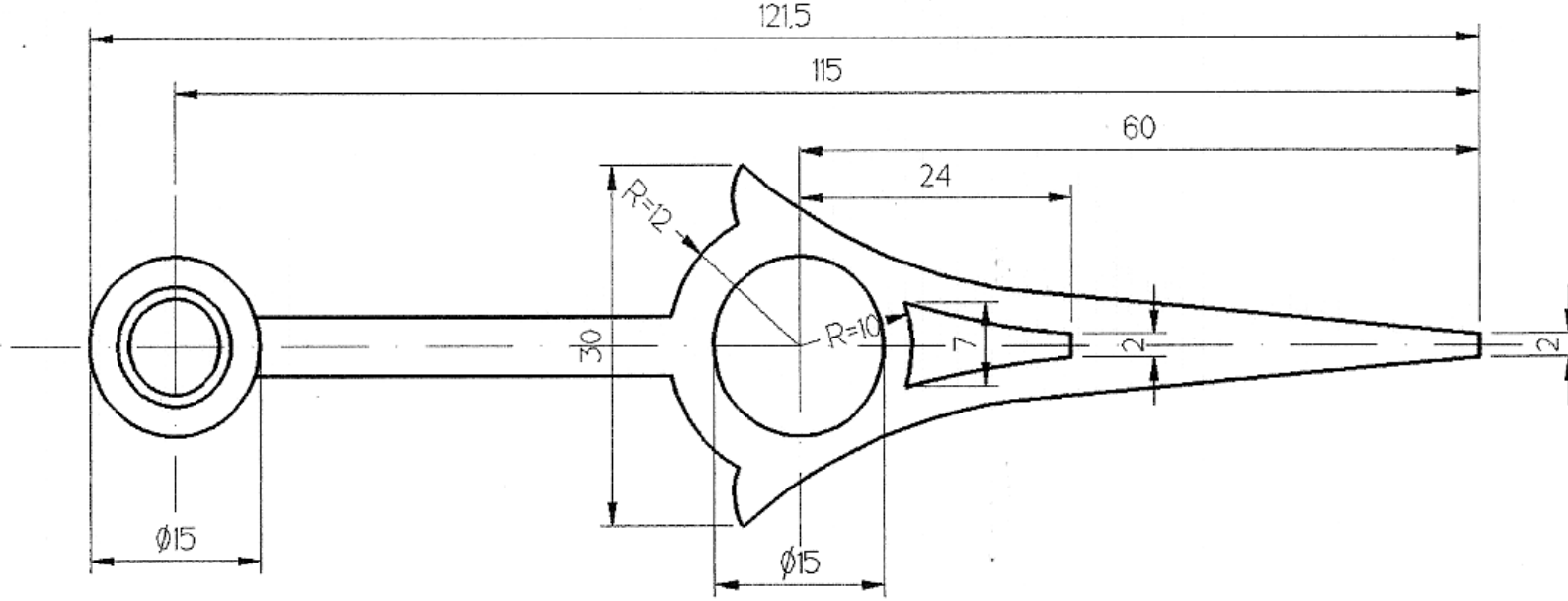
Steek:	11,6	Bestelnr. Hobbyklok
Breedte:	4,3	081987
Dikte:	1,05	

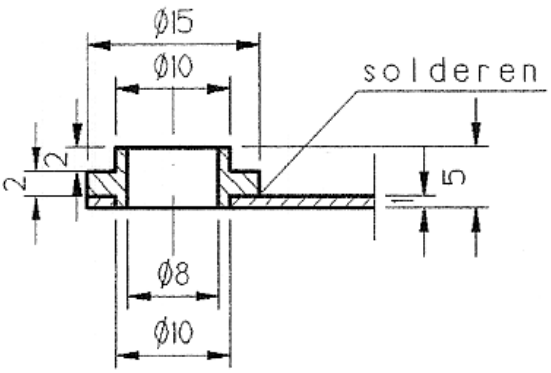




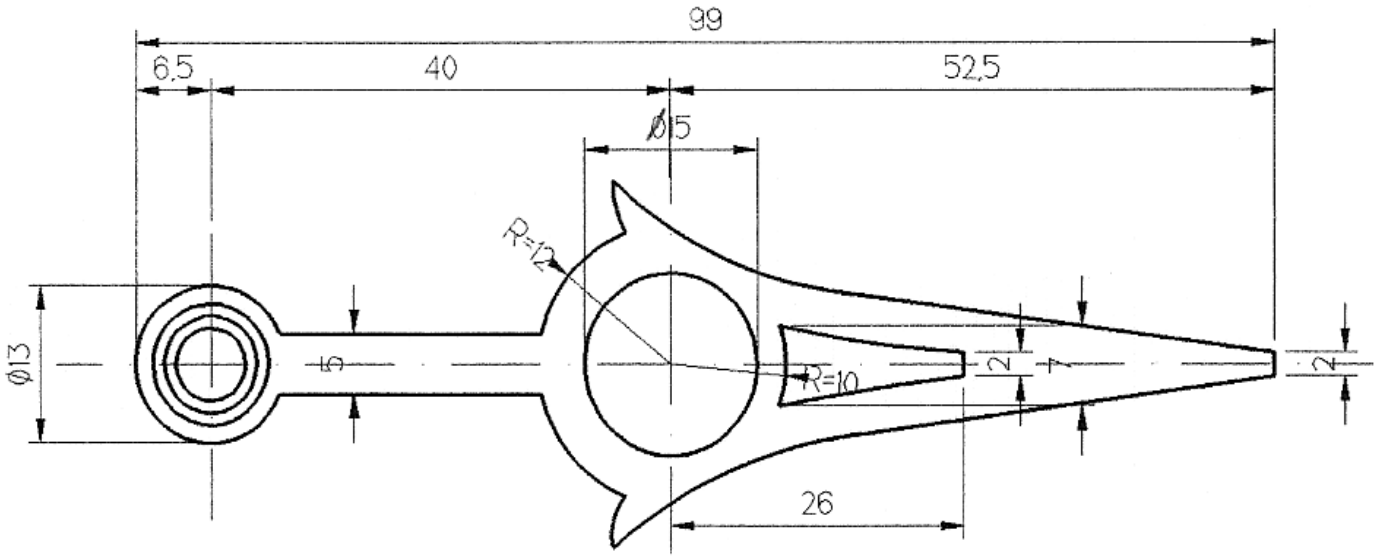


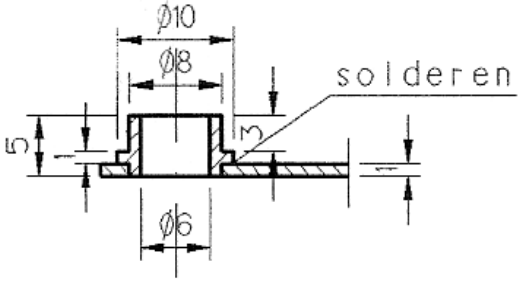
Lepelas in klepelhouder vast-
klinken. Stand en buiging van
klepelhouder bij montage bepalen.



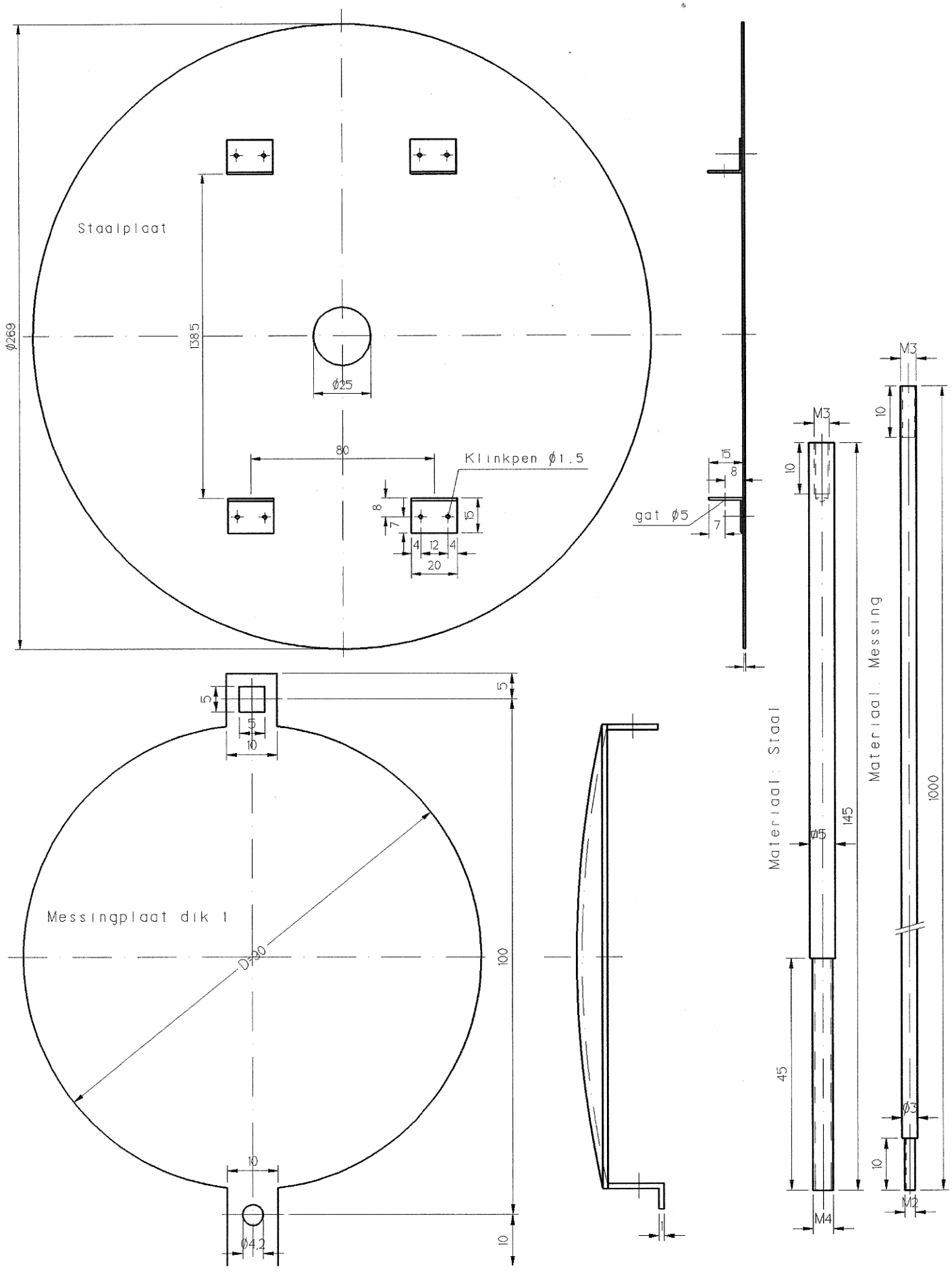


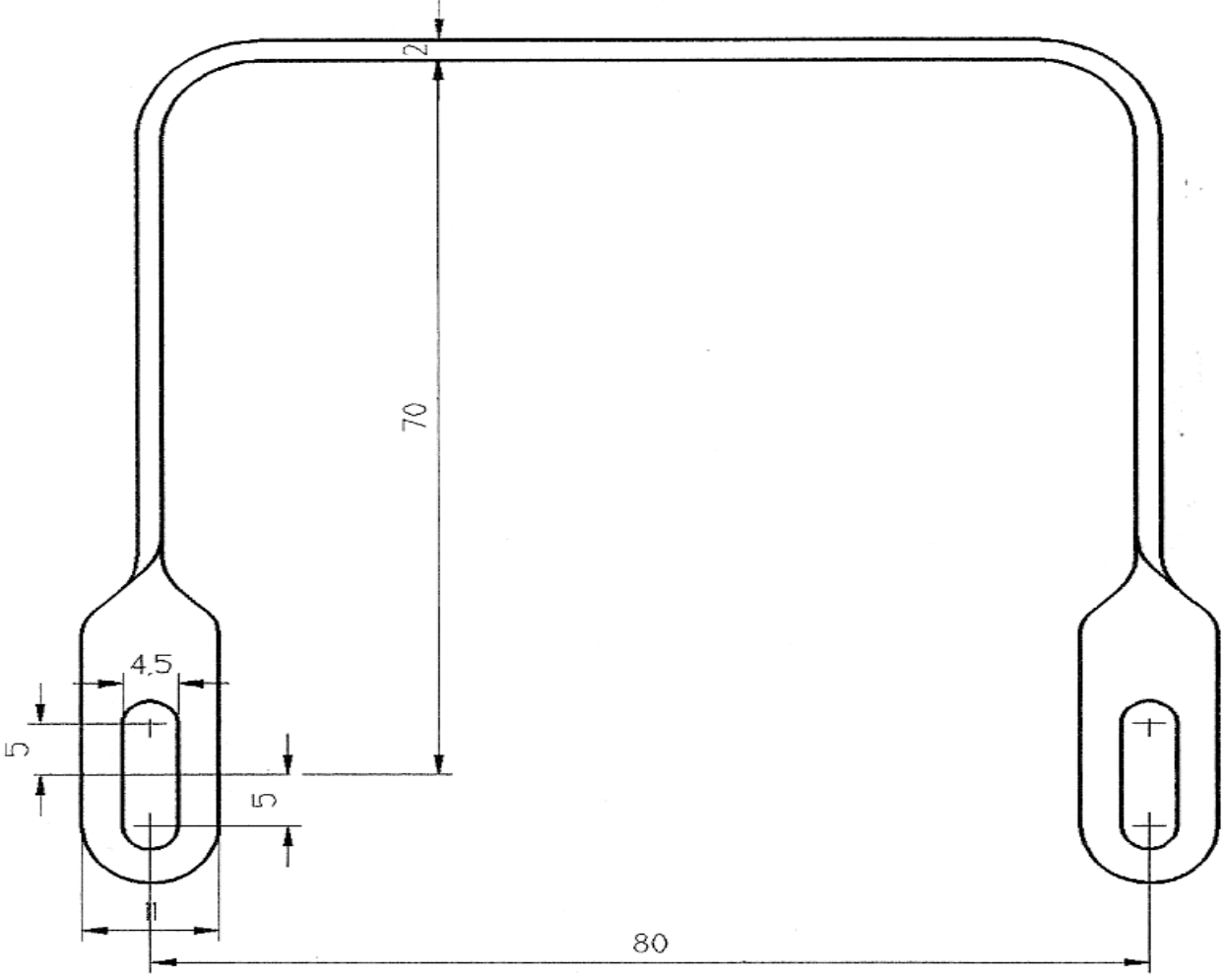
Uurwijzer materiaal messing.





Minutenwijzer materiaal messing.


Staalplaat
Ø269
138.5
Ø25
80
Klinkpen Ø1.5
8
7
15
4
12
4
20
gat Ø5
15
8
7
Messingplaat dik 1
D=90
5
5
5
10
100
10
Ø4.2
10
M3
10
M3
10
Ø5
145
45
M4
Materiaal: Staal
Materiaal: Messing
1000
Ø3
10
M2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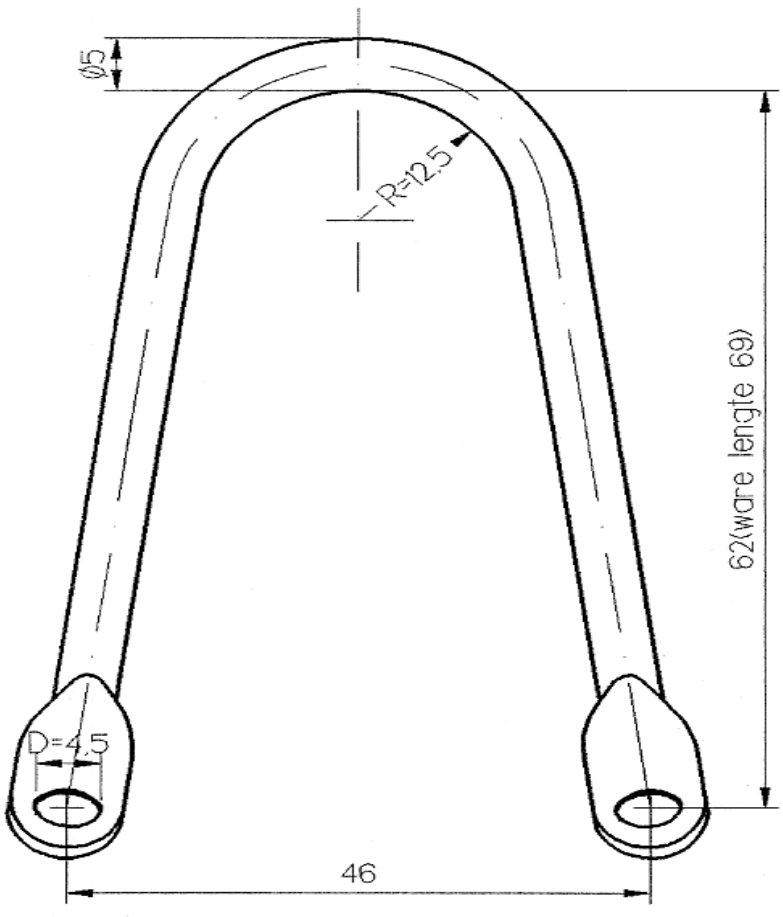
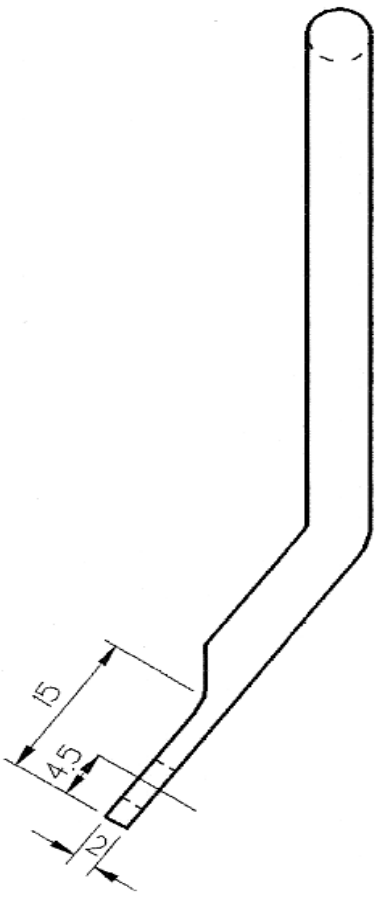
70
4,5
5
5
11
80


Ø5
R=12,5
62(ware lengte 69)
D=4,5
46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4,5
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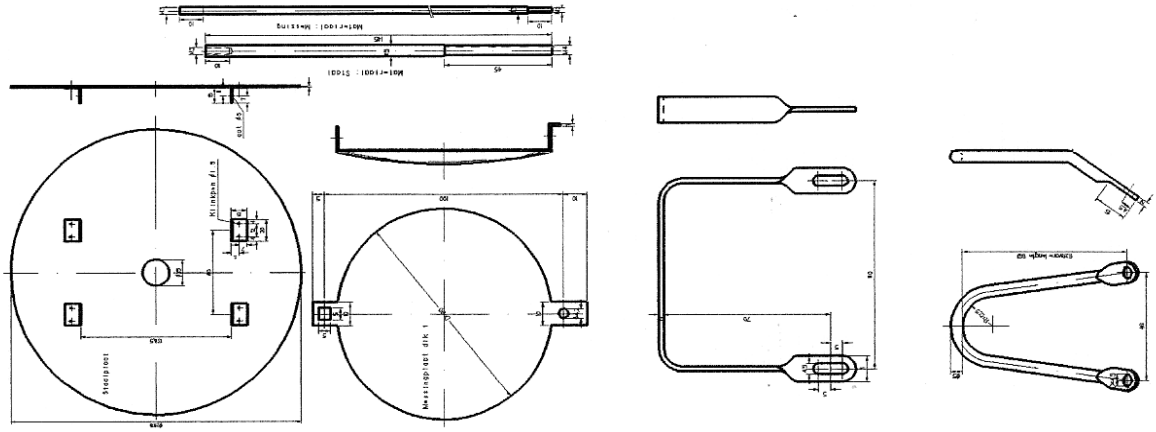
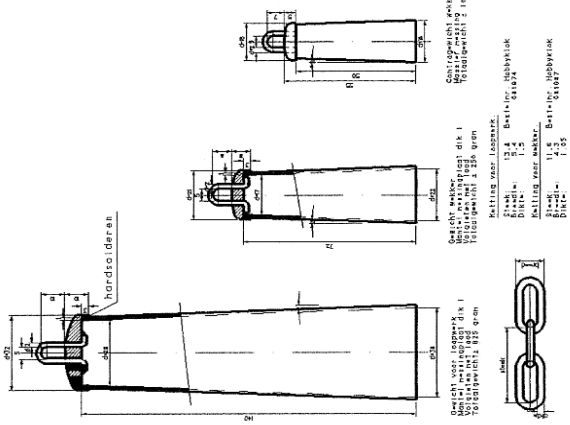
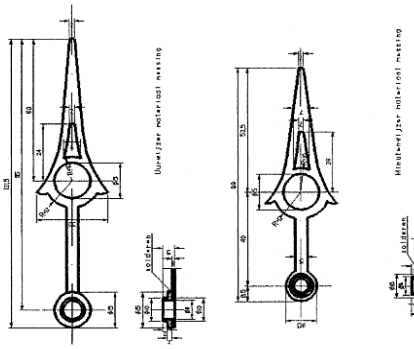
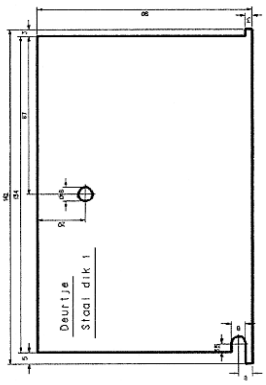
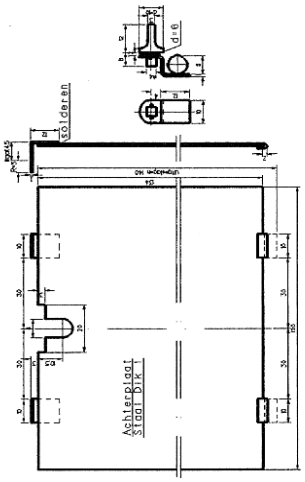
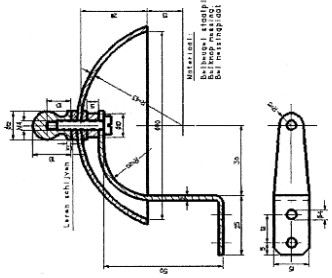


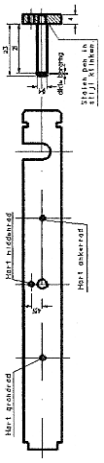


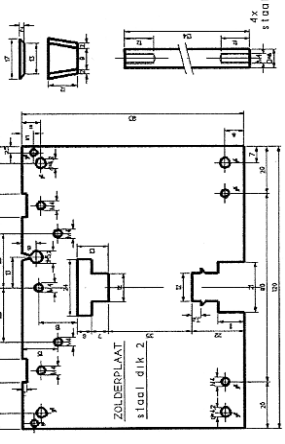


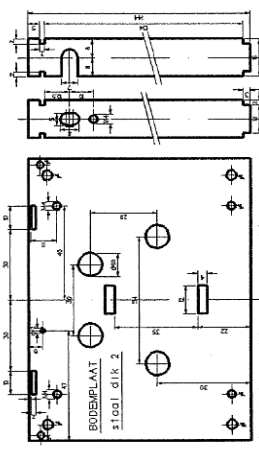




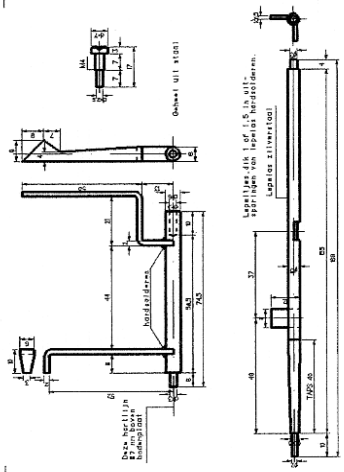


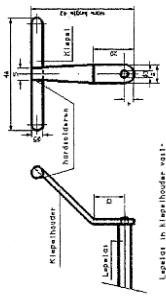


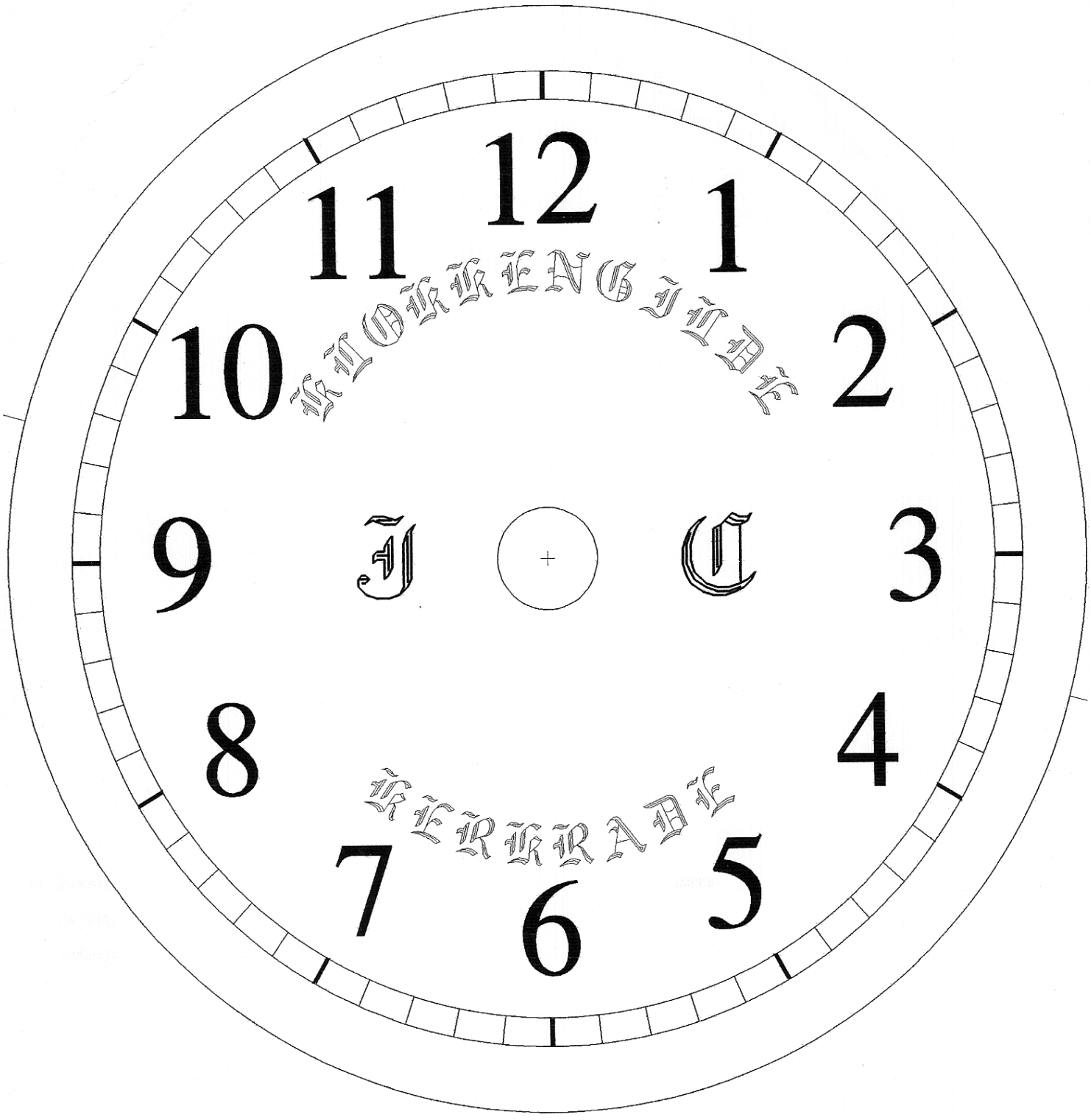




de met * gemarkte gaten in zolder- en bodemplaat SAMEN boren.






12
1
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3
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6
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11
KLOKKENGJUTE
JC
KERKRADE