

Universitätsbibliothek Karlsruhe

III E 261 (2)- Tafeln

Redtenbacher, Ferdinand

Theorie und Bau der Turbinen

Mannheim

1860

di

oro a.

a.

UB KARLSRUHE

III E

261

Taf. (2)

7 190

III E 261 - Taf. (2)

7

THEORIE UND BAU

D E R T U R B I N E N

VON

F. REDTENBACHER,

Großherzoglich Badischer Hofrath, Ritter des Zähringer Löwen und des Norwegischen St. Olafsordens, Director der
Großh. polytechnischen Schule und Professor des Maschinenbaues in Carlsruhe.

21 lithographirte Tafeln

M A N N H E I M

1860.

VERLAGSBUCHHÄNDLUNG VON FRIEDRICH BASSERMANN.



III E 261 ²

NIEDERDRUCK-TURBINE.

Tafel I.

mit Leitkurven.

Fig. 1

Fig. 5

Fig. 4

Fig. 2

Fig. 3

1/10 nat. Gr.

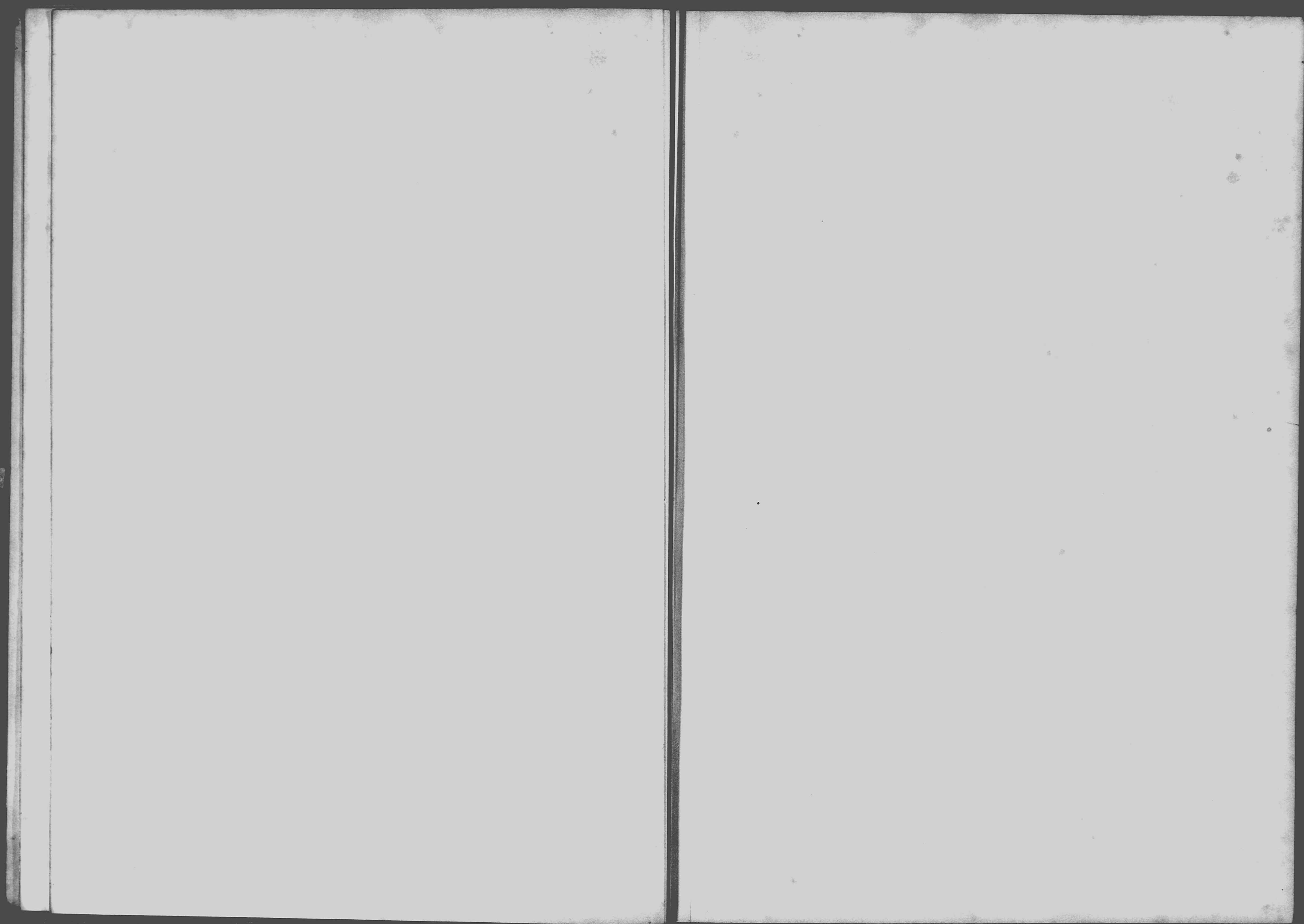
Fig. 6

Fig. 7

gefälle 185 m.
Wassermenge pro 1" 124 Kub. Met.
Absoluter Effect in Pferdekräften
Anzahl der Umdrehungen pro 1" 179.

Maasstab = 1/25 d. nat. Gr.

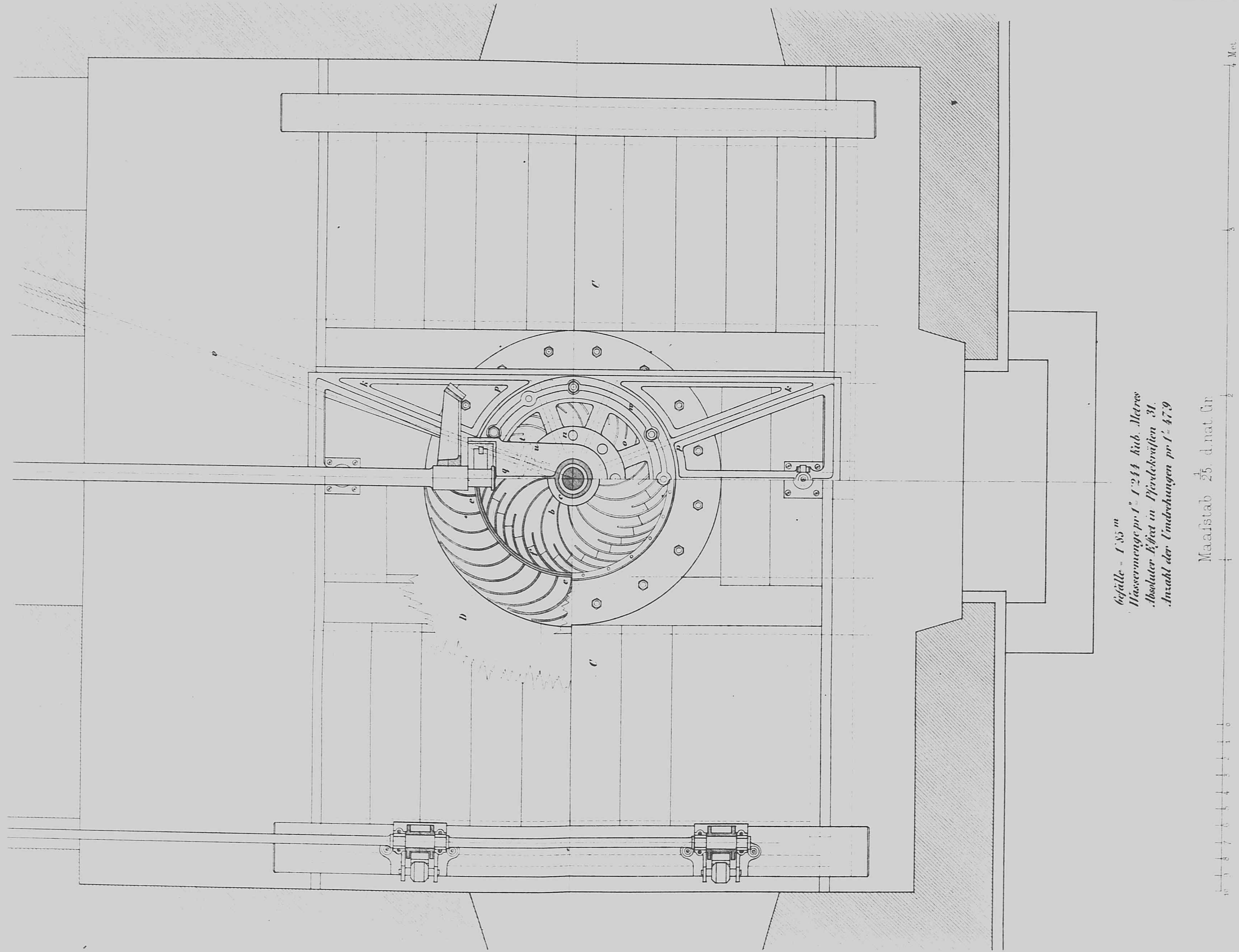
6 Met.

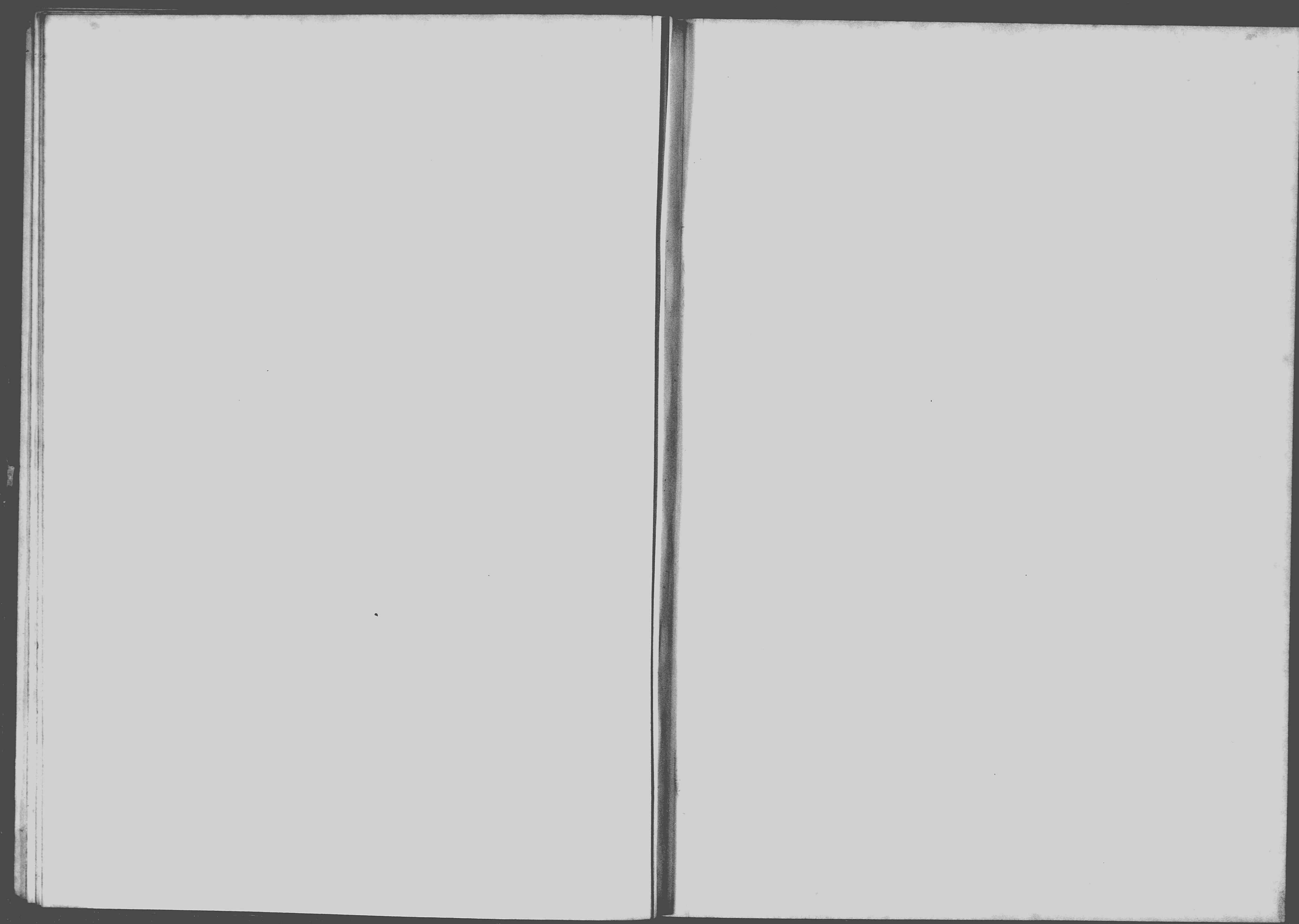


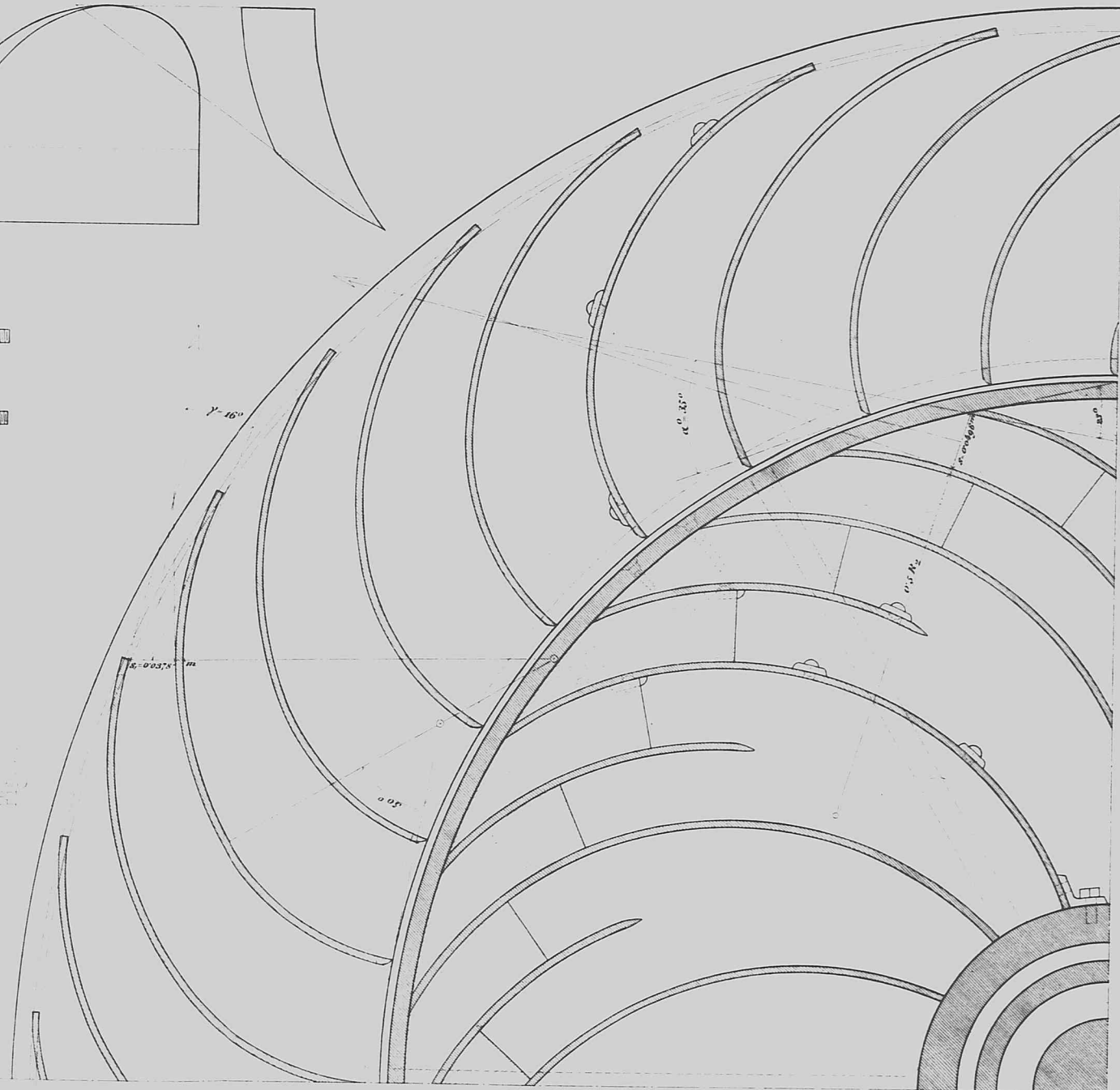
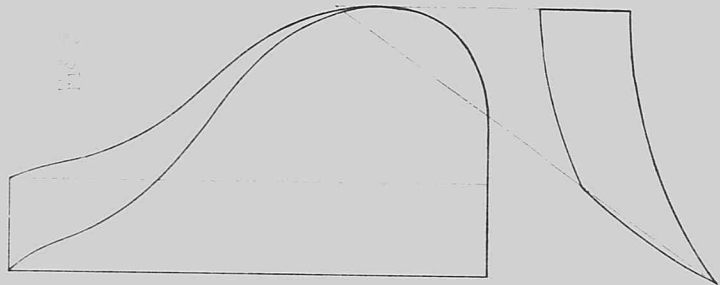
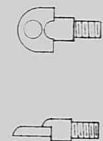
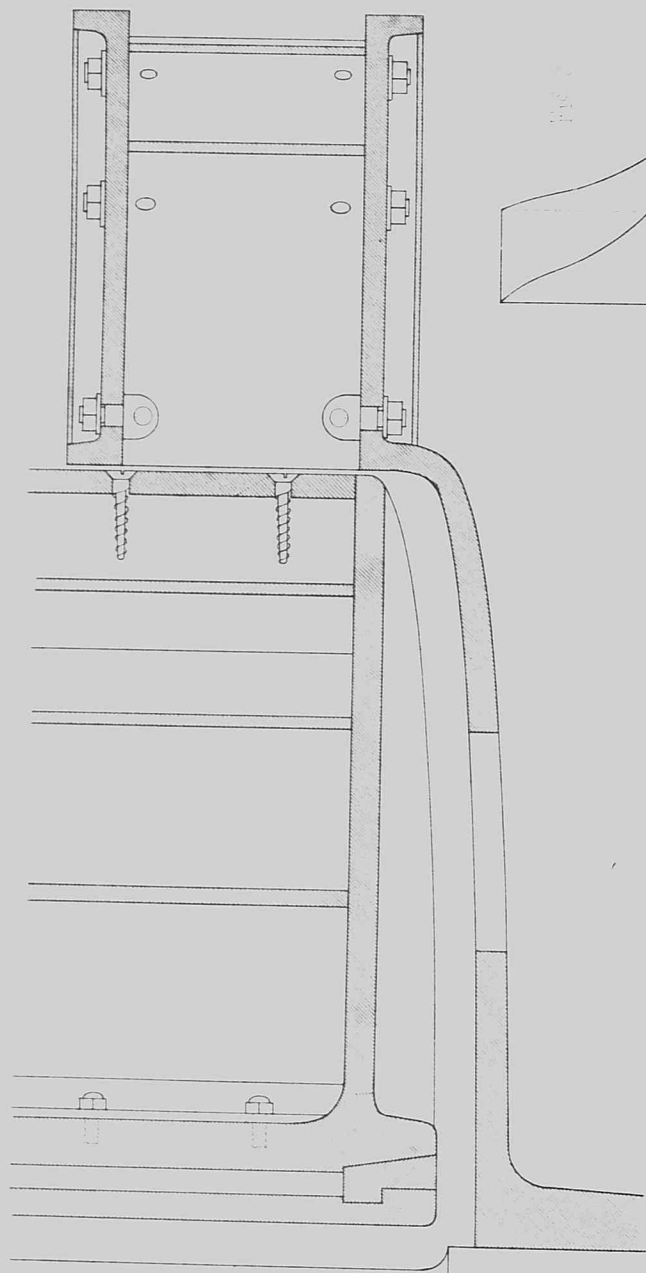
TECHNISCHE ZEITUNG FÜR NIEDERDRUCK-TURBINE

Tafel II

Mit Lockurven

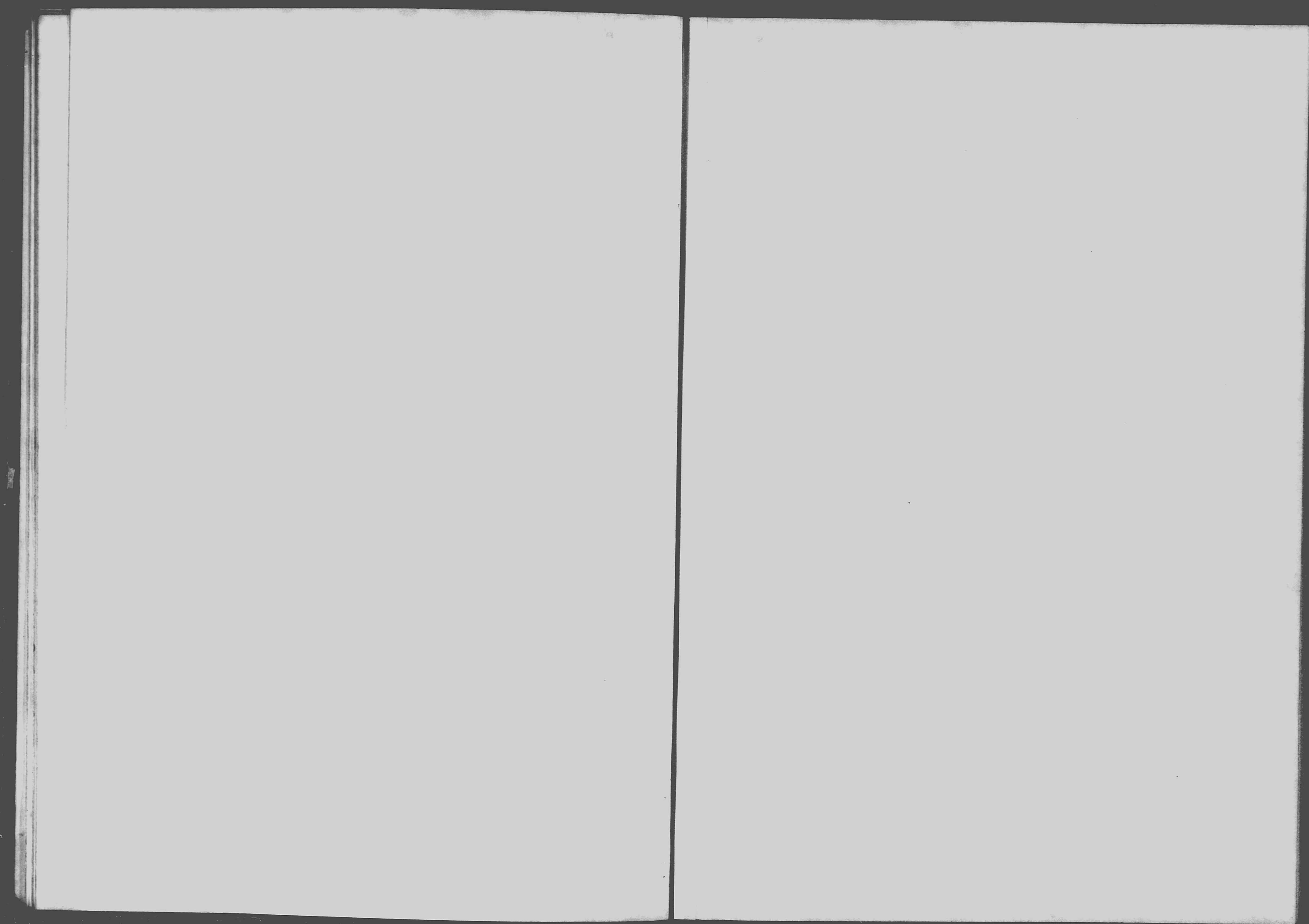


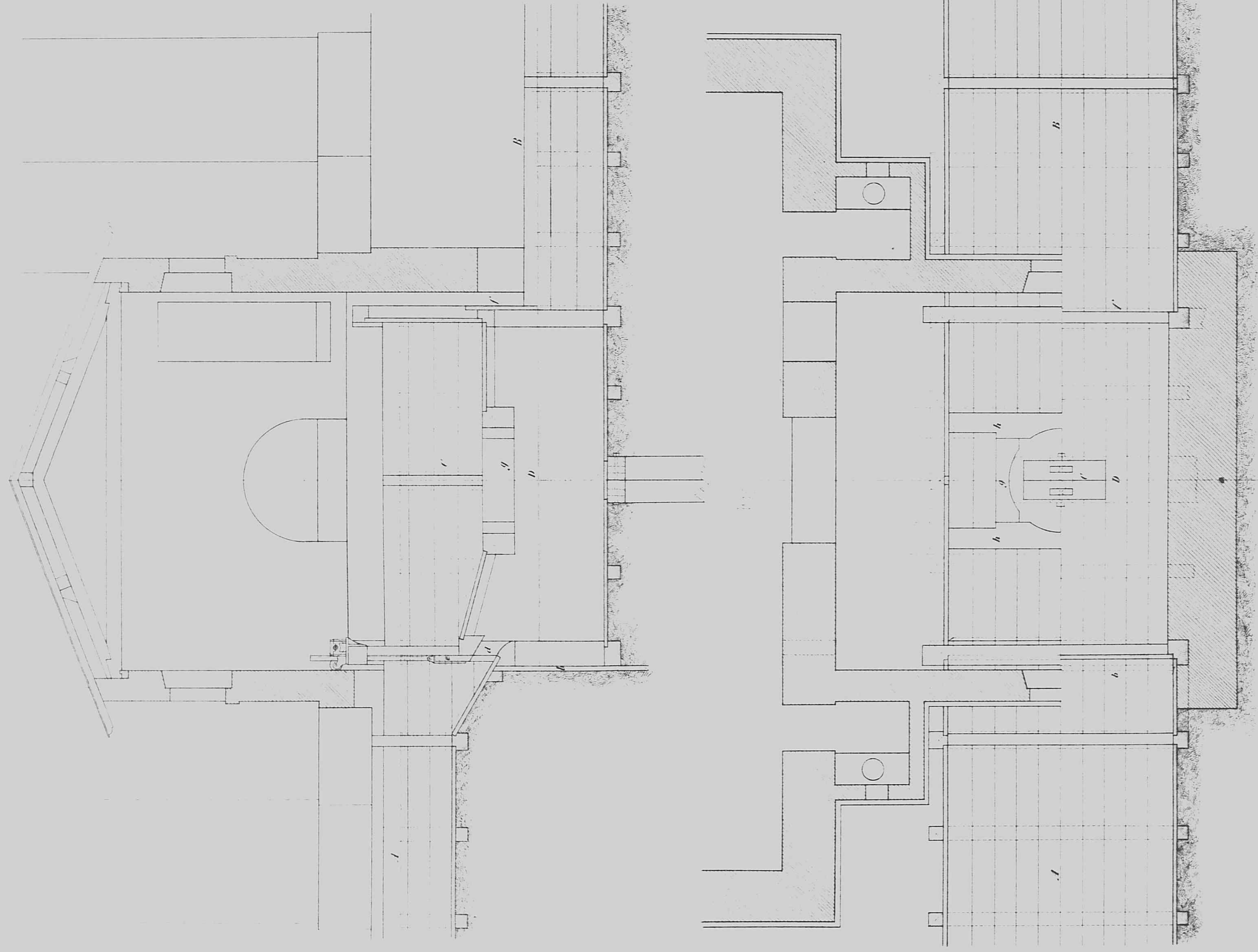


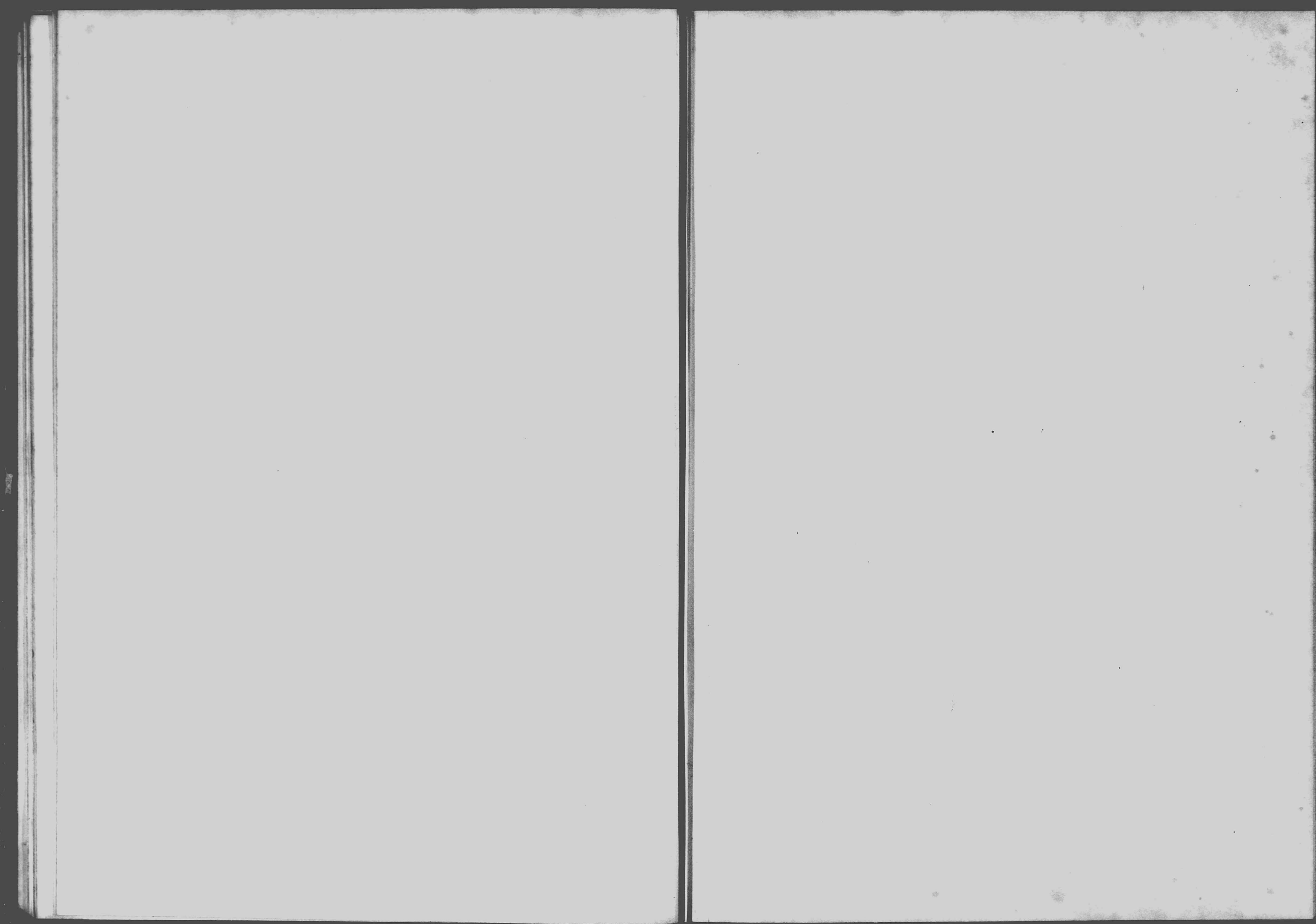


Maassstab 1:1 nat. Gr.





Maximal Value of G



SPINNECK-TURBINE

Tafel V

Fig. 3. Grundriss.

Größe 8^m
 Wassermenge pro 1. 0,6 Kub. M.
 Absoluter Kopf in Windmühlent 60
 Anzahl der Umdrehungen pro 1' 163

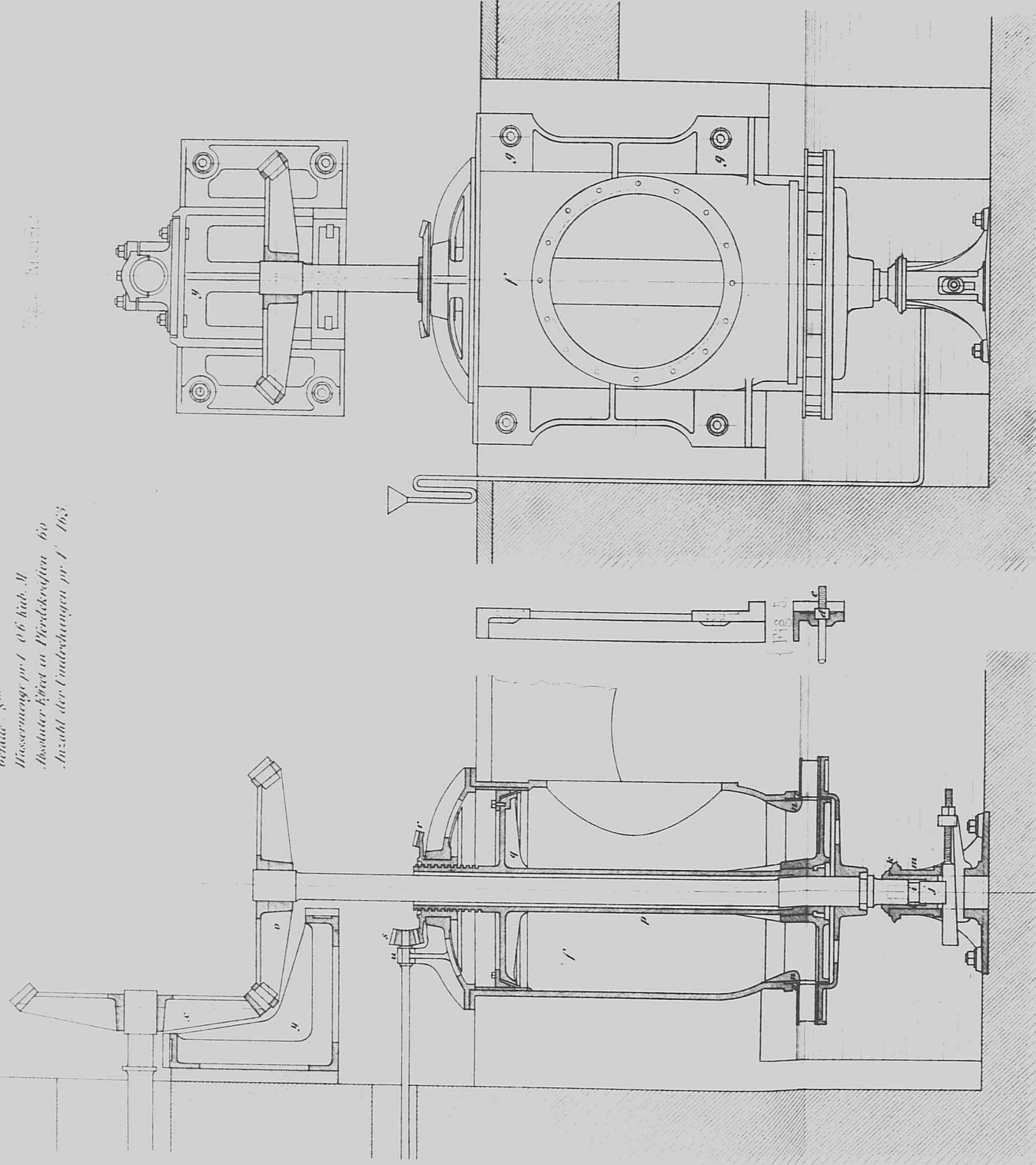
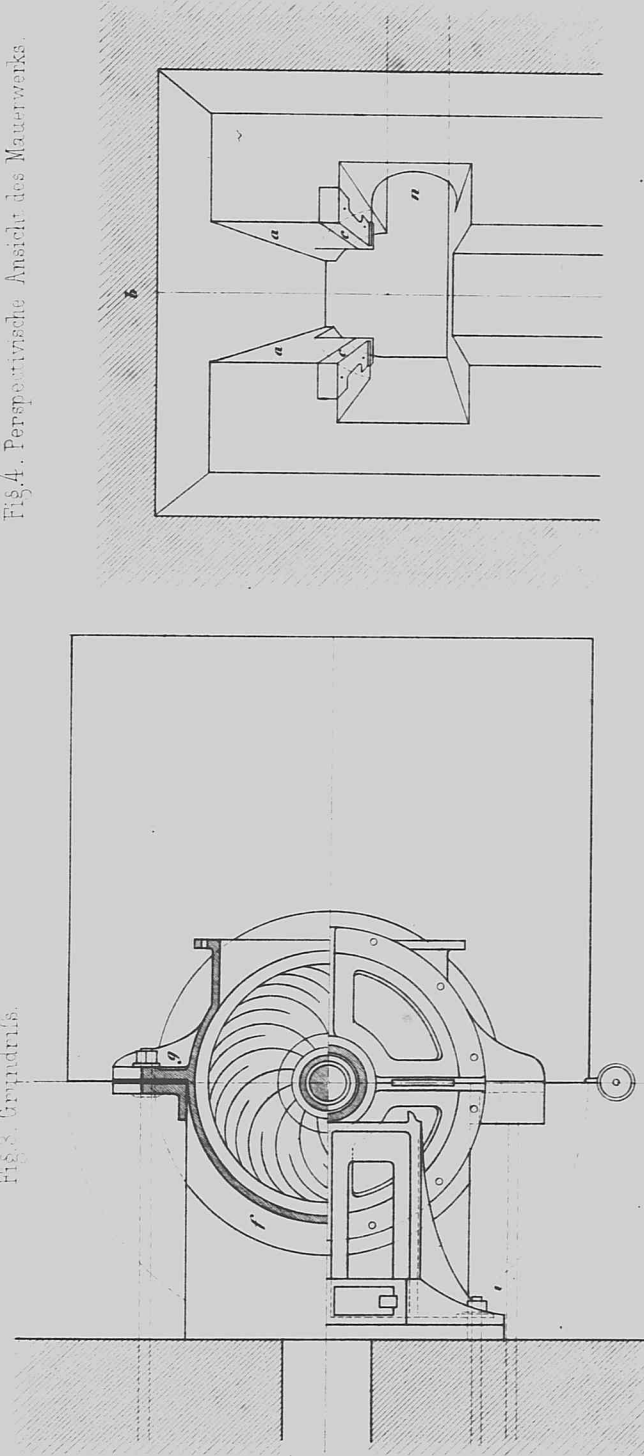


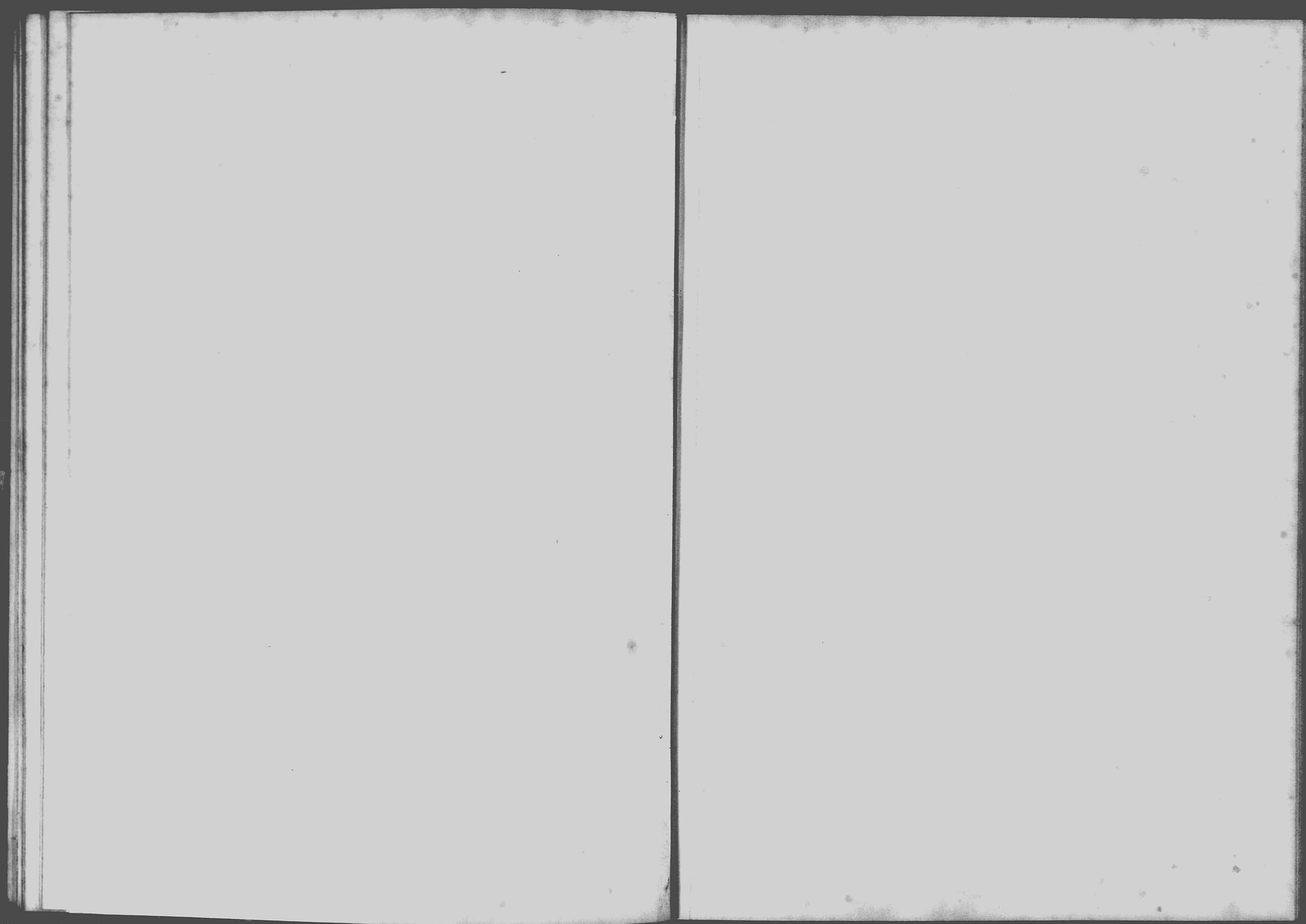
Fig. 3. Grundriss.

Fig. 4. Perspektivische Ansicht des Mauerwerks.

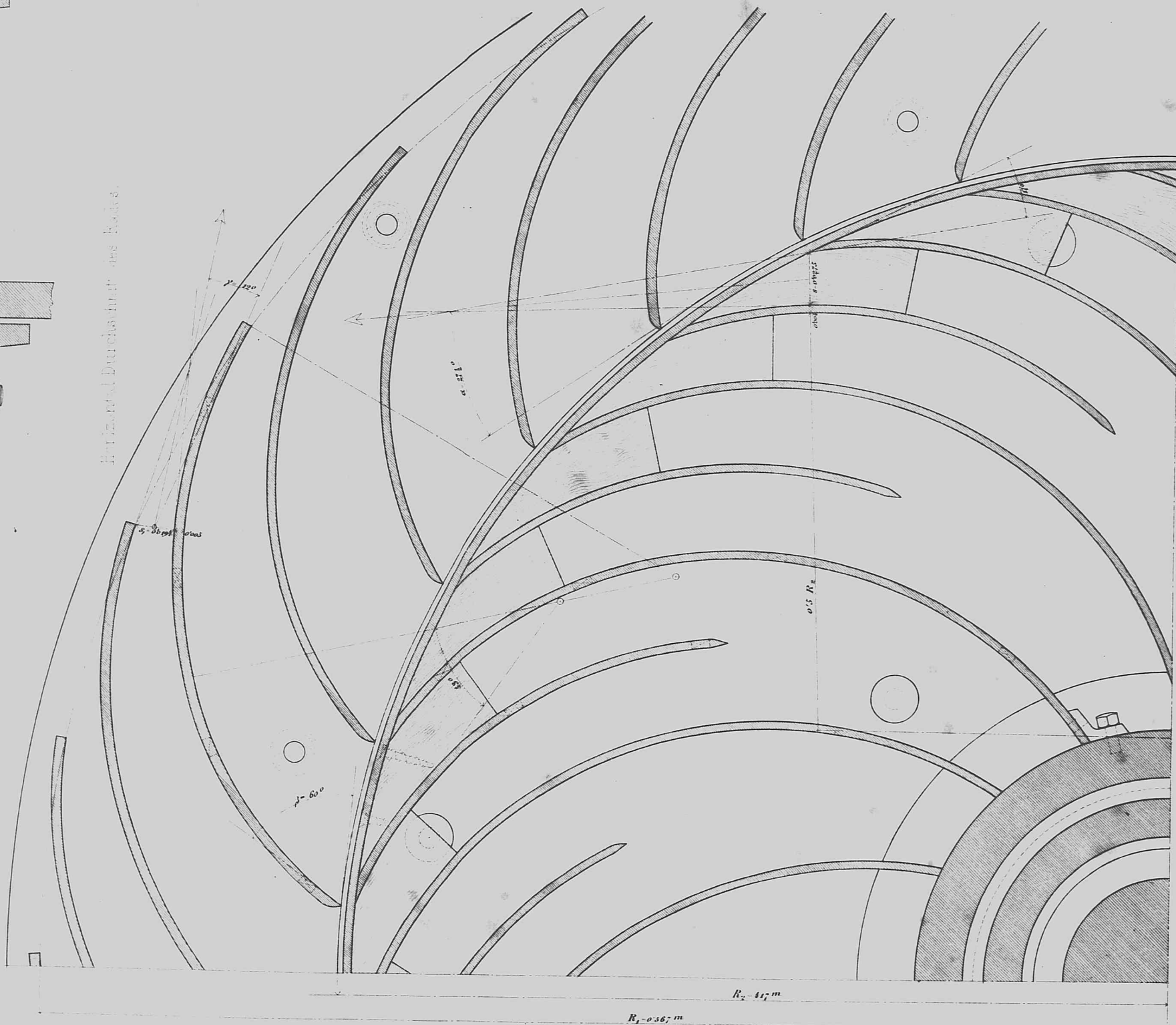
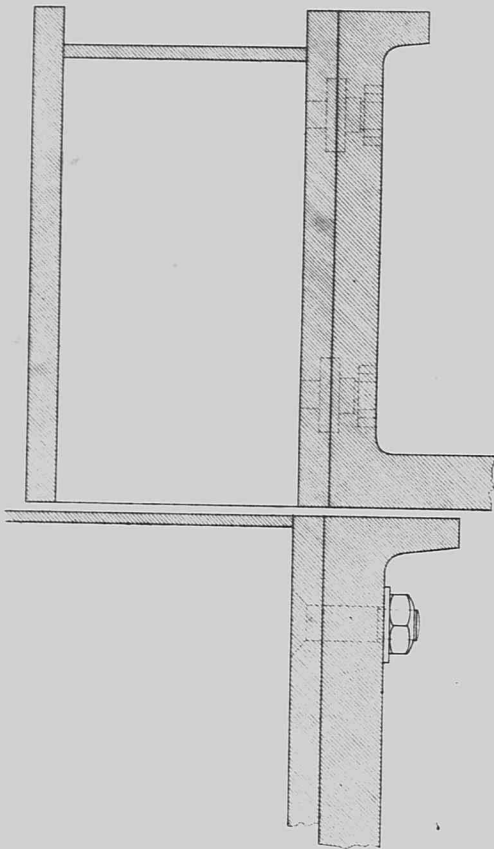
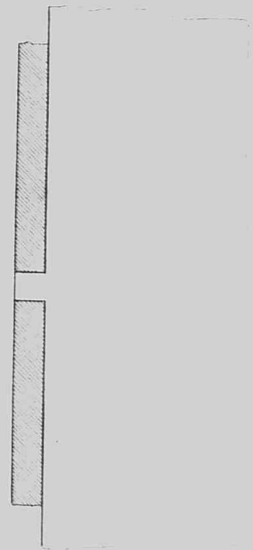


Maßstab $\frac{1}{50}$ nat. Gr.

0 1 2 3 4 5 6 7 8 9 10



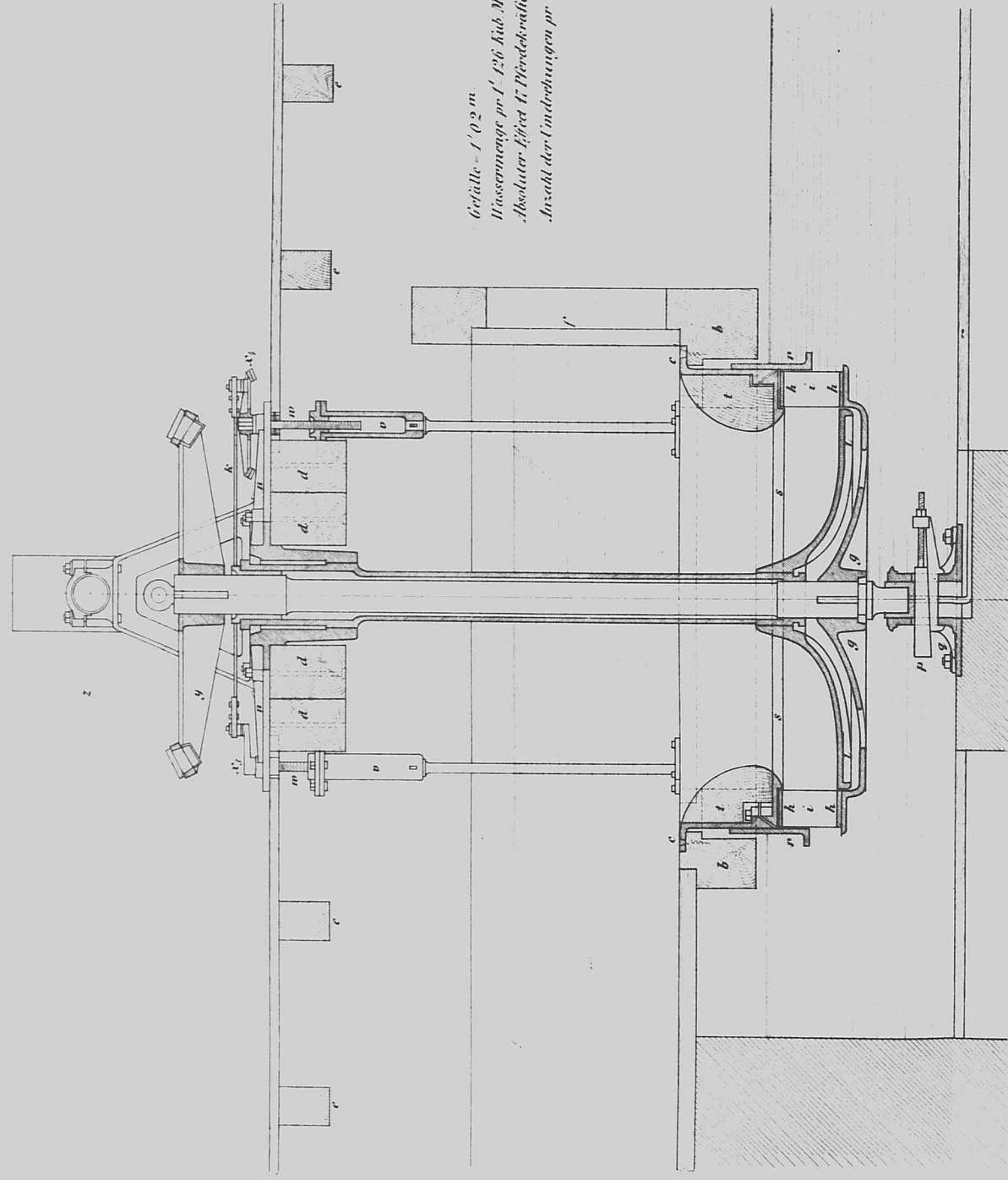
Tafel VI



Maafstab = $\frac{4}{10}$ dnat. Gr.

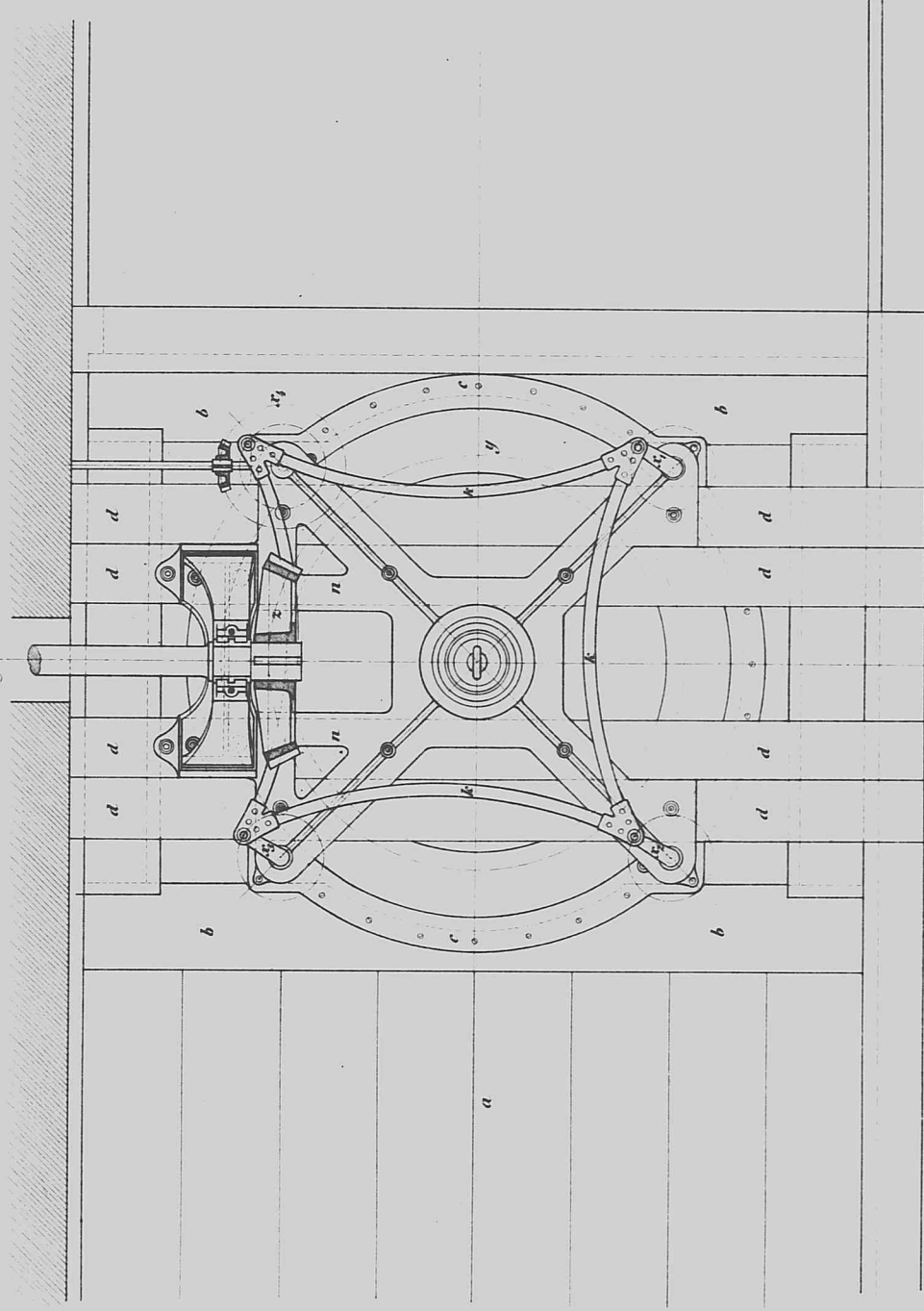
Lith. Anst. v. L. Geisendorfer Verlagsges.





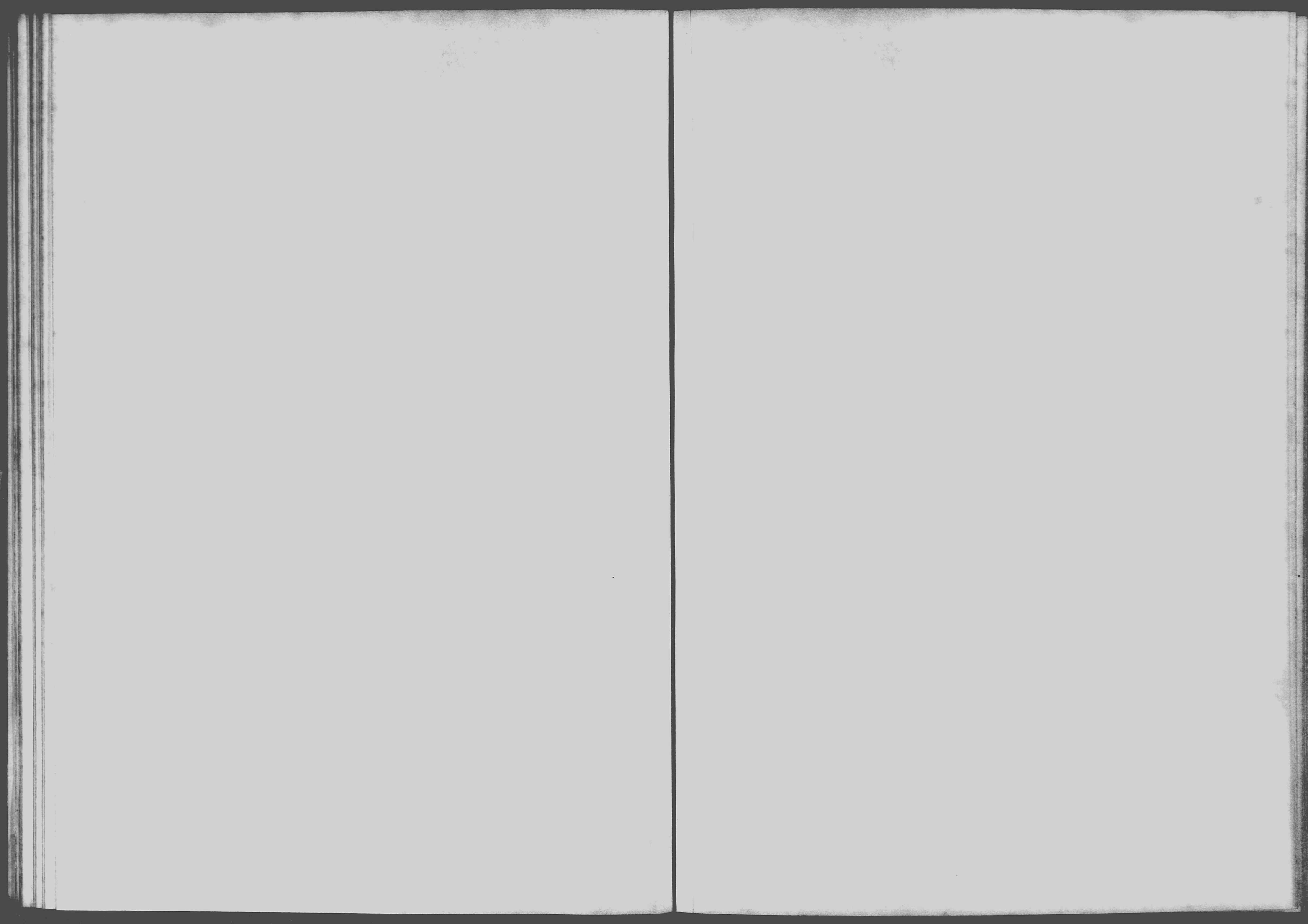
Gefälle = 1' 02 m
 Wassermenge pro 1' 126 Kub M.
 Absoluter Effect 17 Pferdekräfte
 Anzahl der Umdrehungen pro 1 327

Fig. 2.



Maßstab $\frac{1}{25}$ nat. Gr.

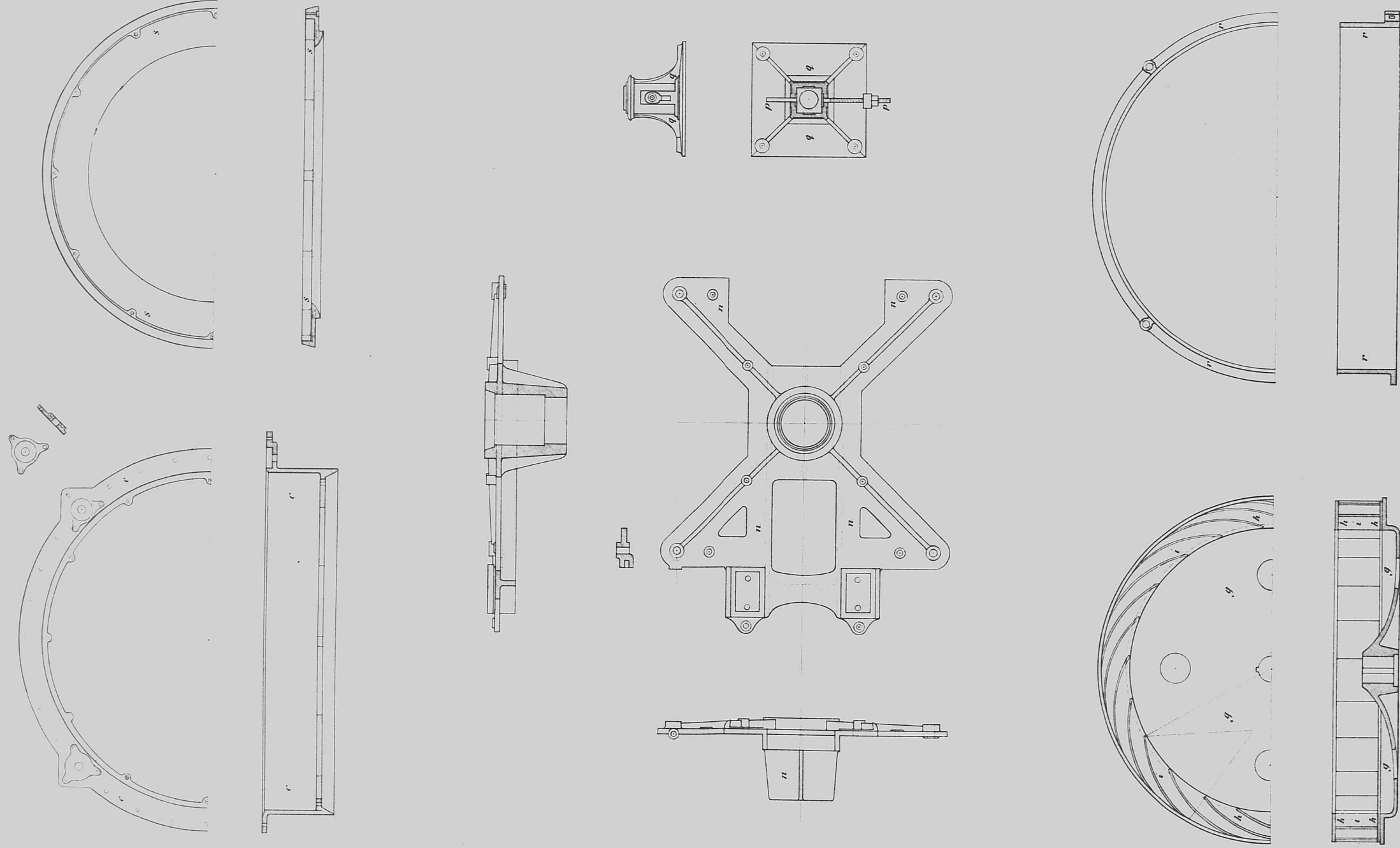




DETAILS ZUR NIEDERDRUCK TURBINE.

Tab. VIII

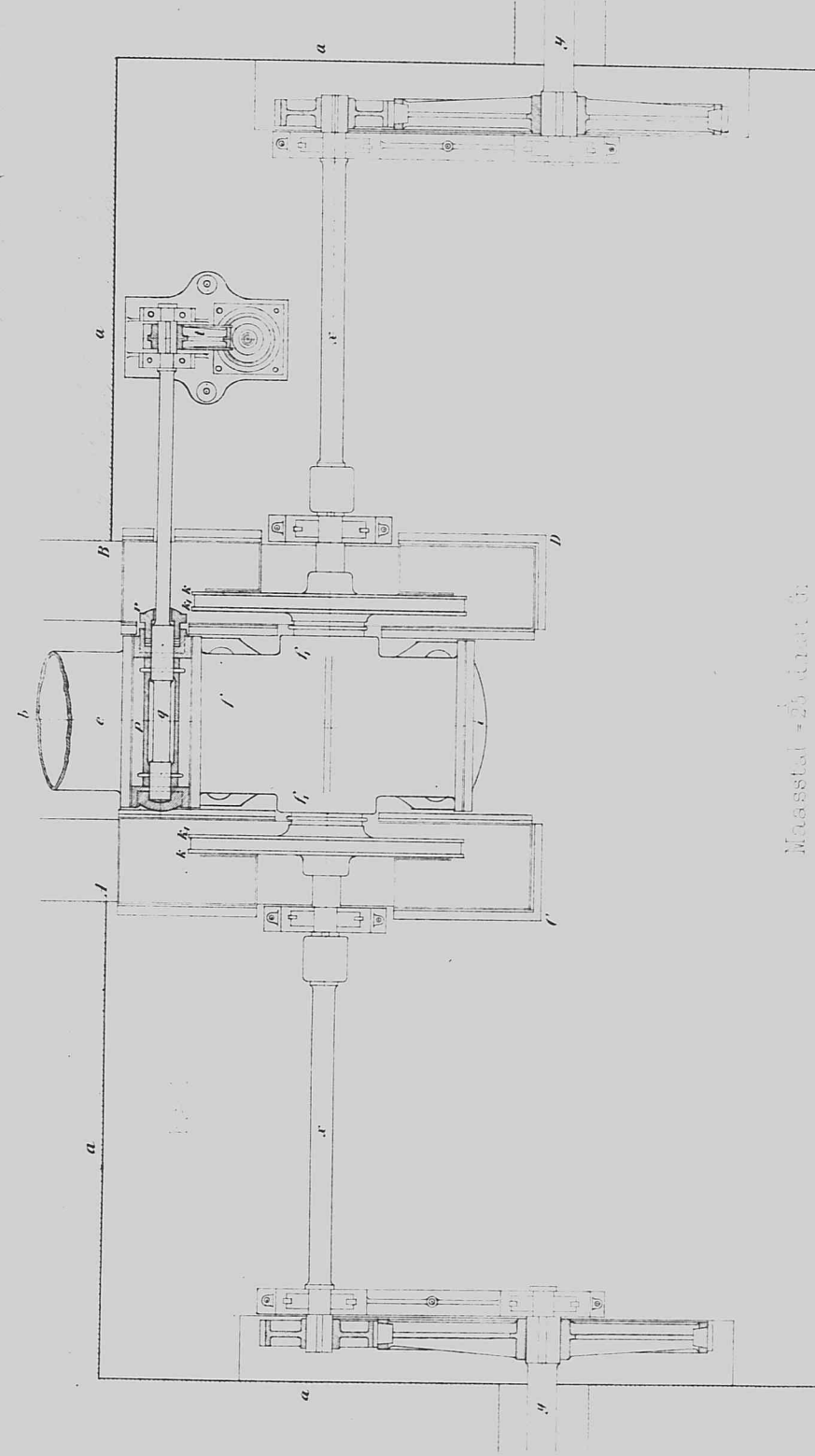
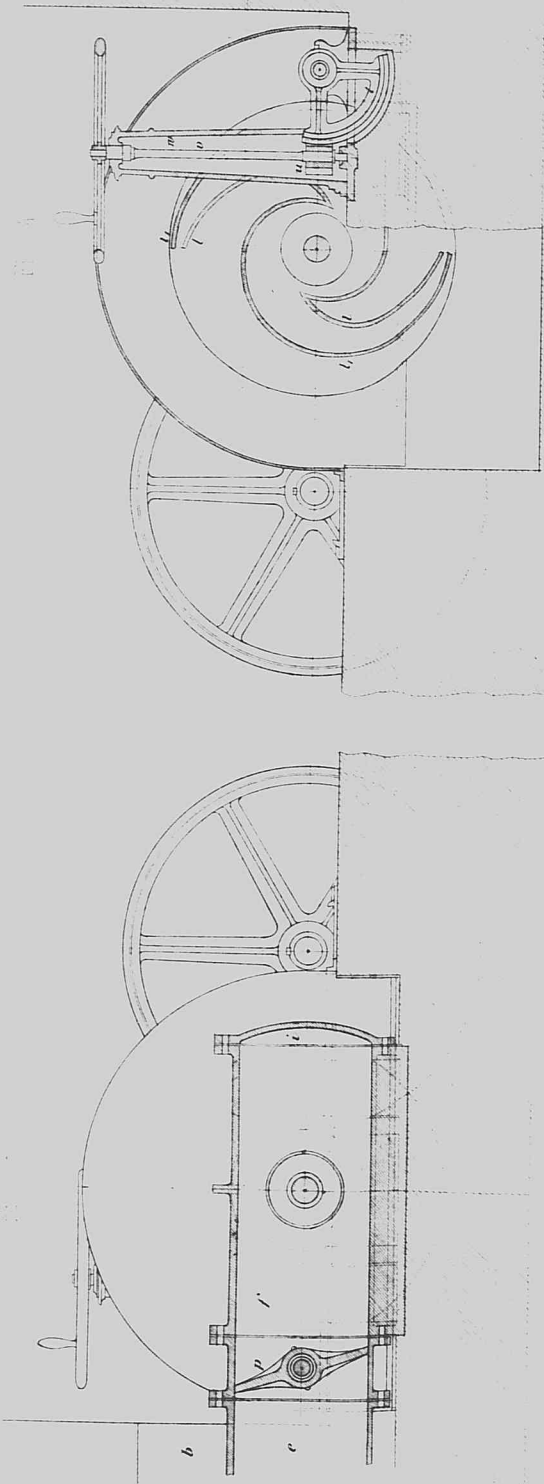
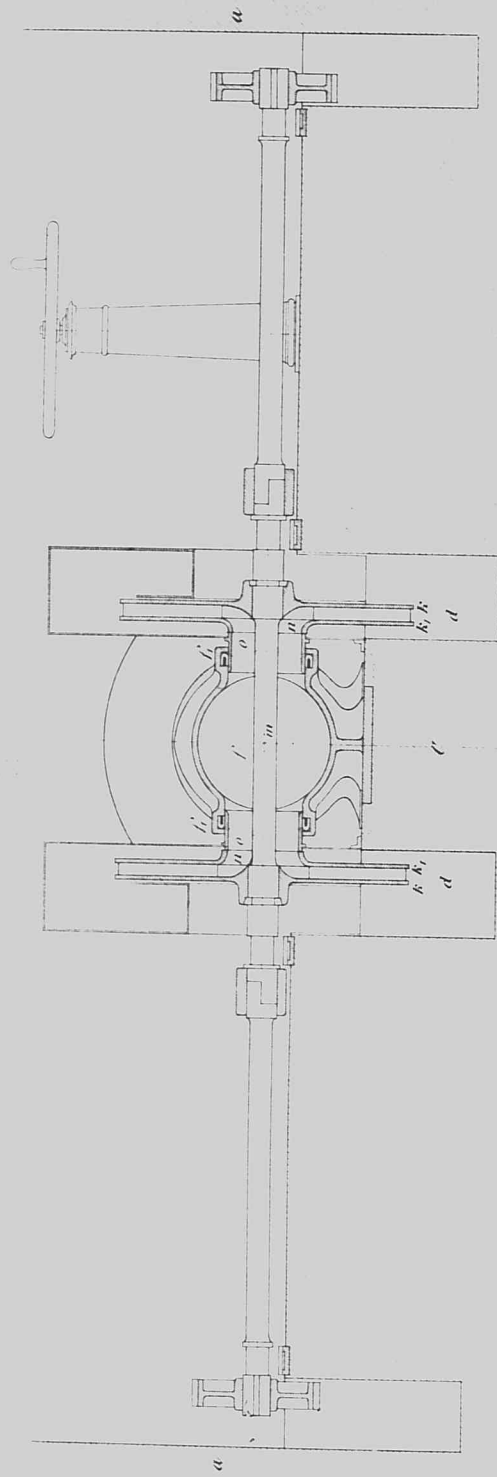
ohne Leerkünnen



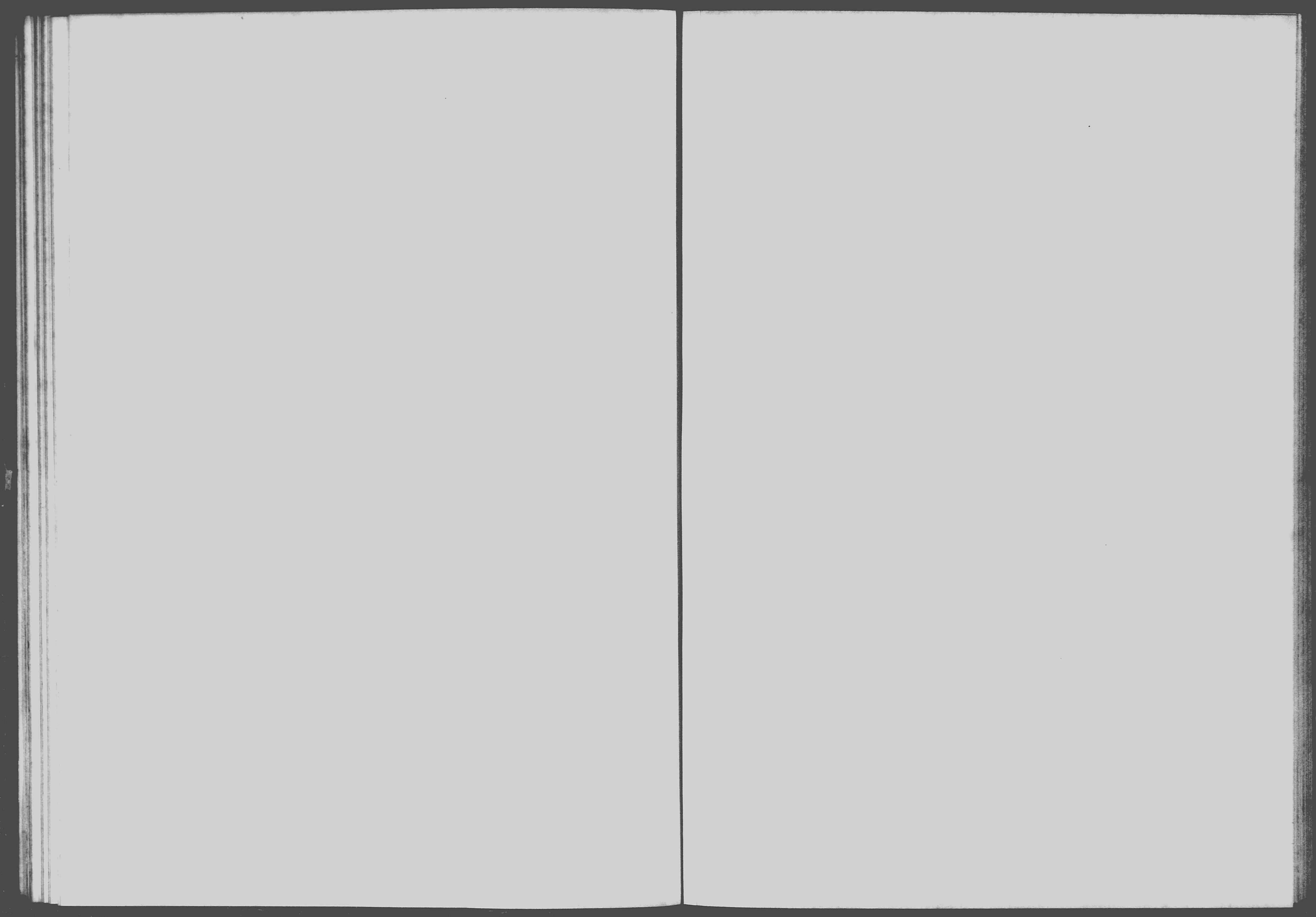
Maassstab = 25 d. nat. Gr.



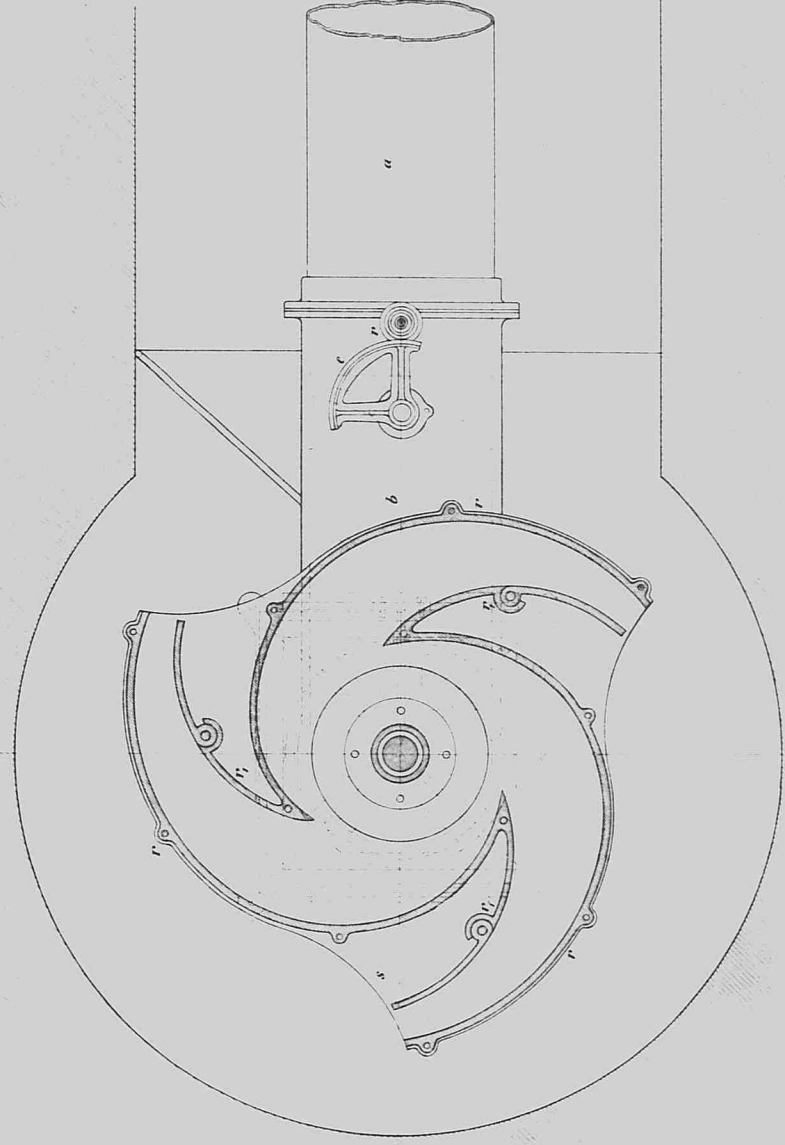
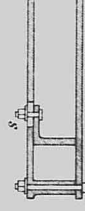
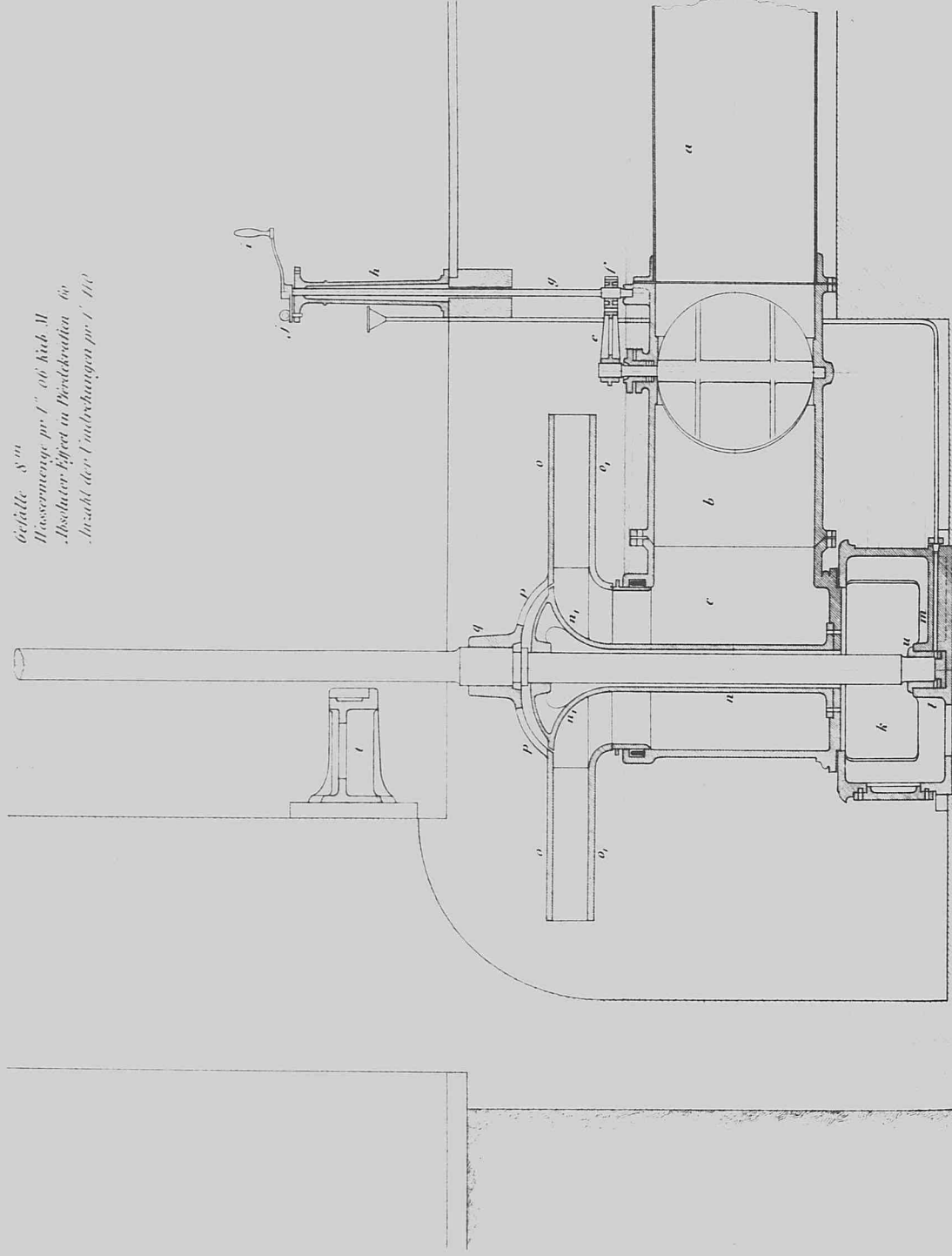
Gefälle 26 m
 Wassermenge pro 1000 l. d. h. d. h.
 Aschauer-Fluß 1,2 Pferdekr.
 Anzahl der Umdrehungen pro 1000



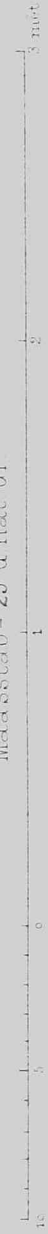
Maßstab = 1/20 d. m. 1:1



Größe 8 m
 Wassermenge pro f. 16 Kub. M.
 Absoluter Effect in Pferdekraft 60
 Anzahl der Umdrehungen pro f. 110



Maassstab = 25 d nat Gr





CONVALISCHE TURBINE Leitrad mit Theodol

Tafel XI

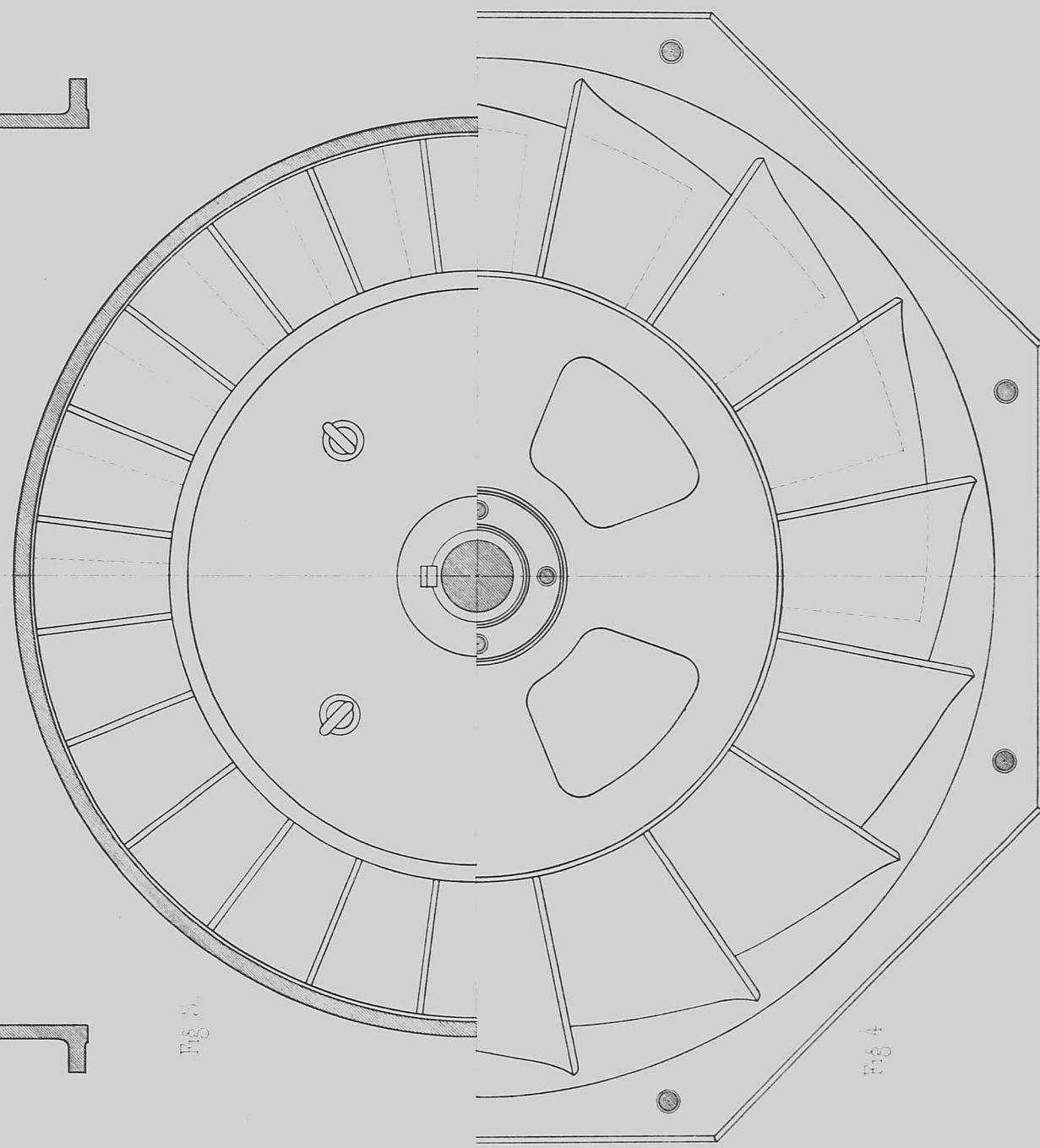
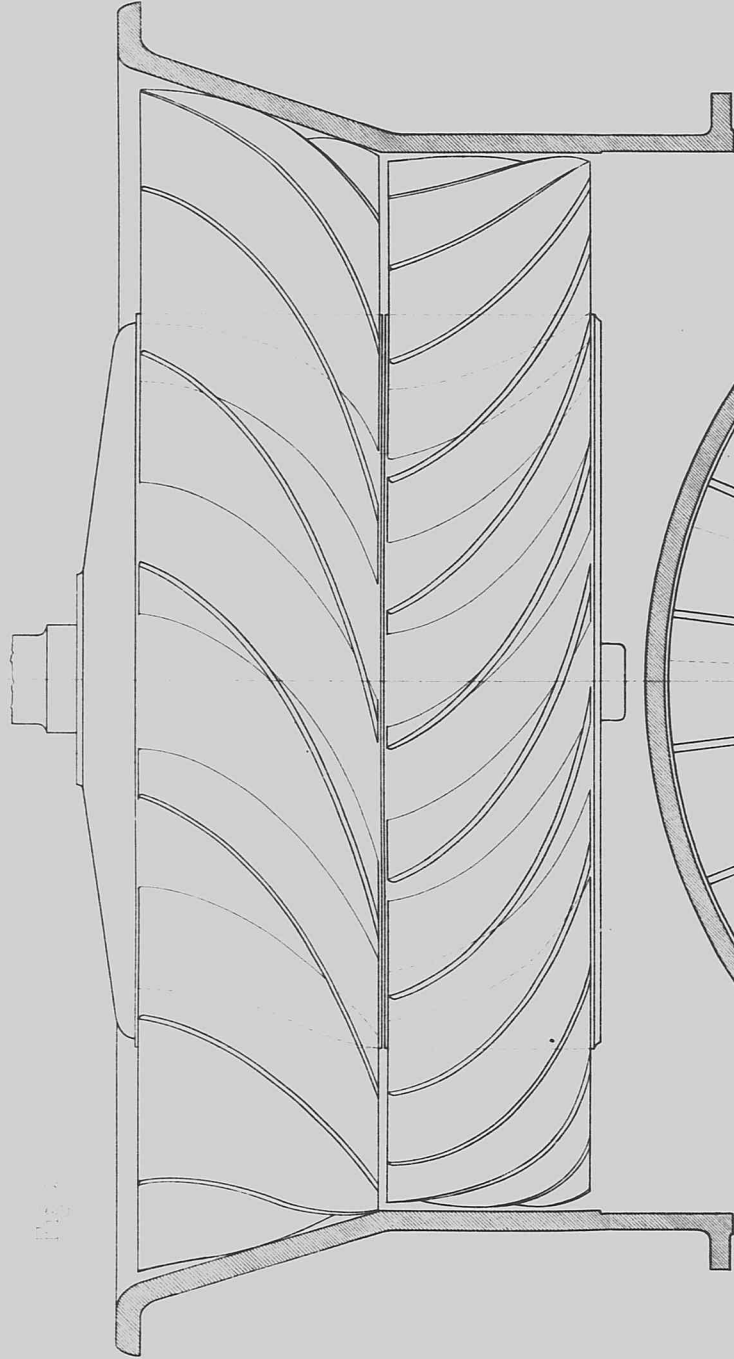
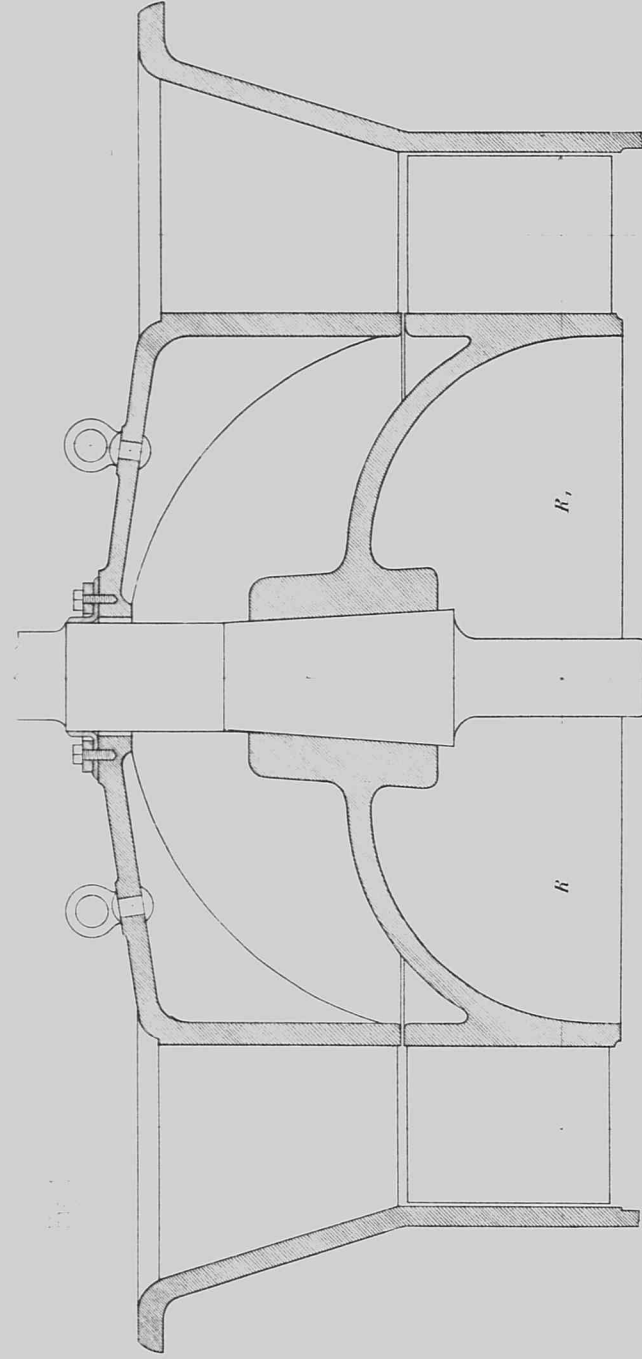


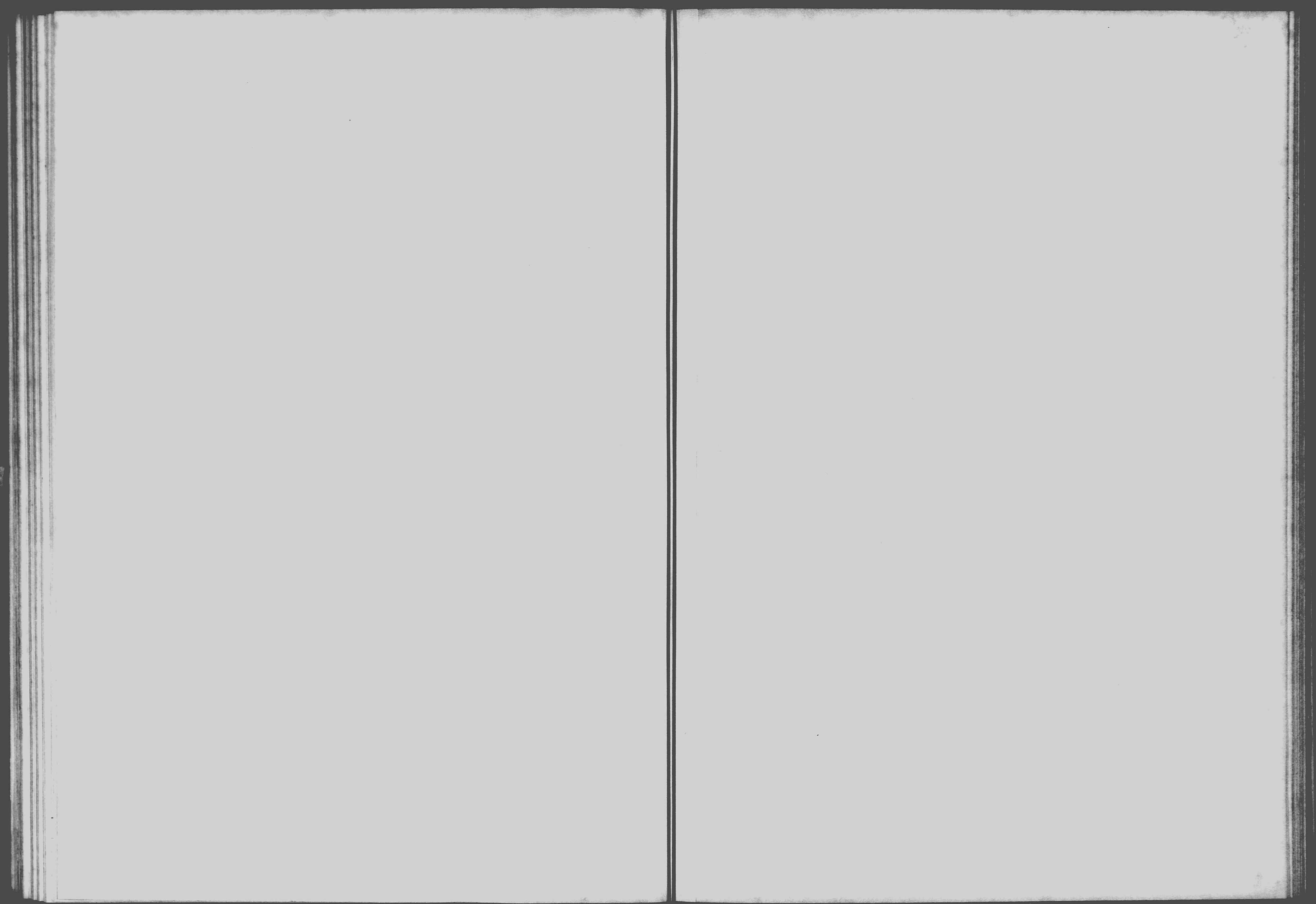
Fig. 4

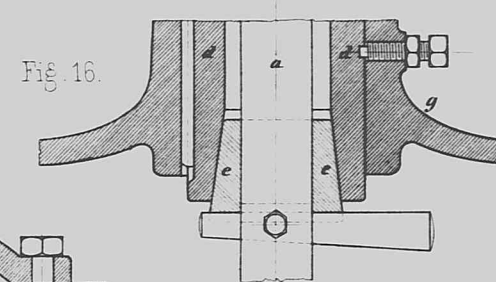
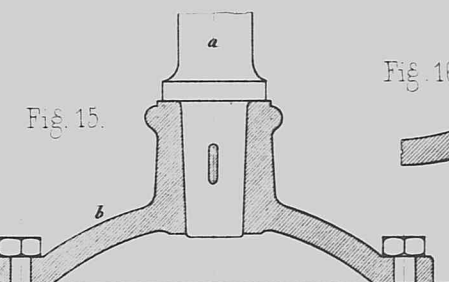
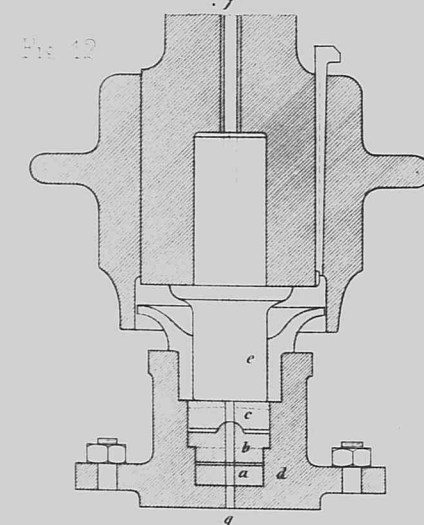
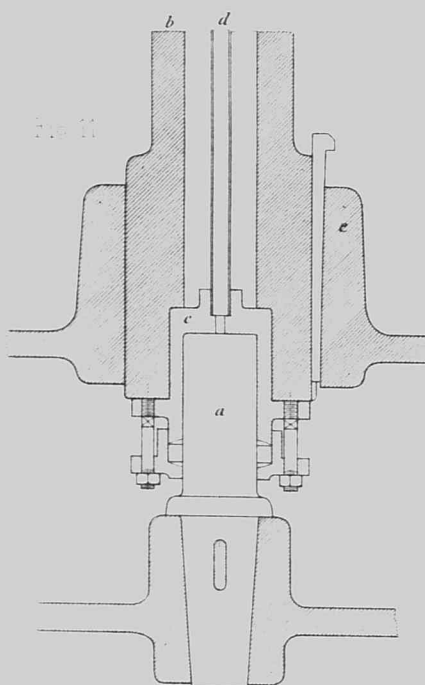
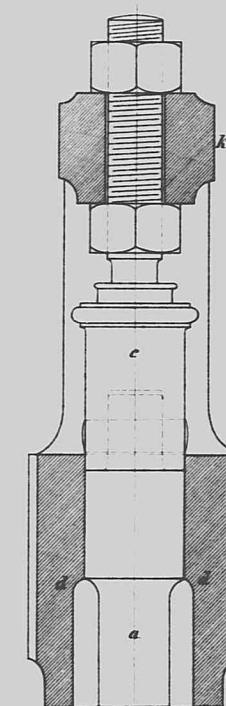
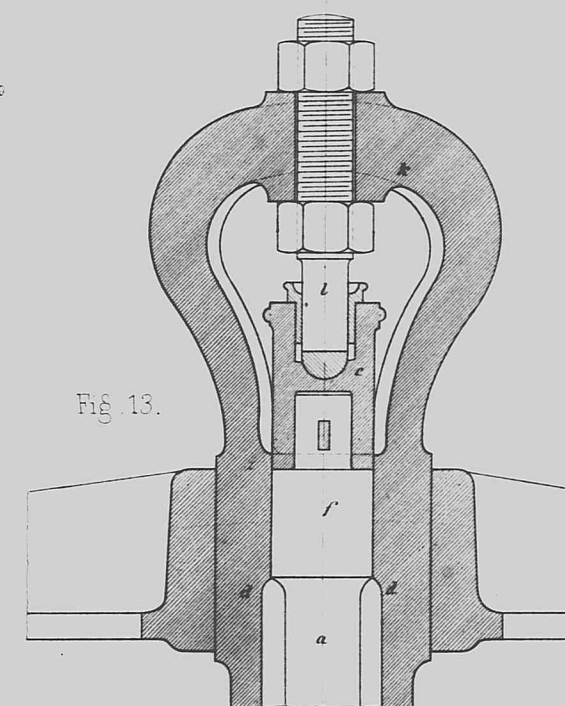
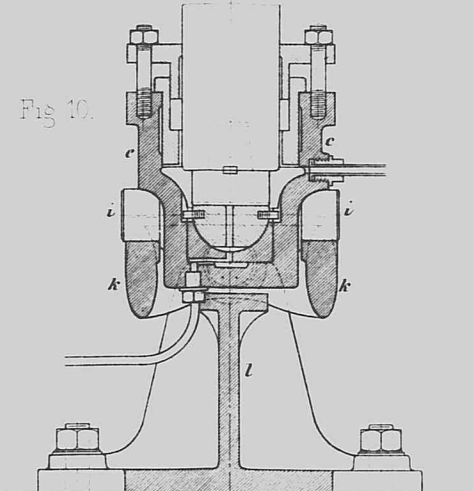
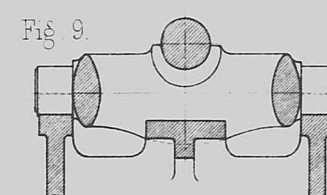
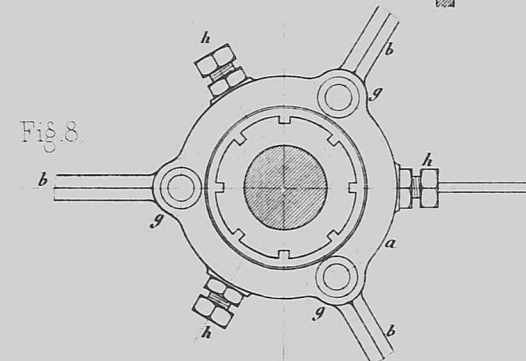
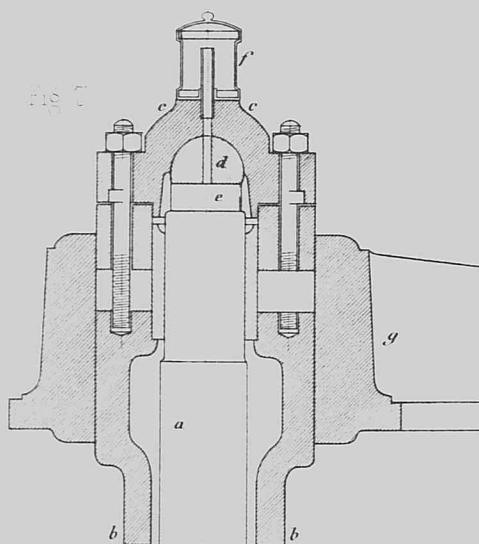
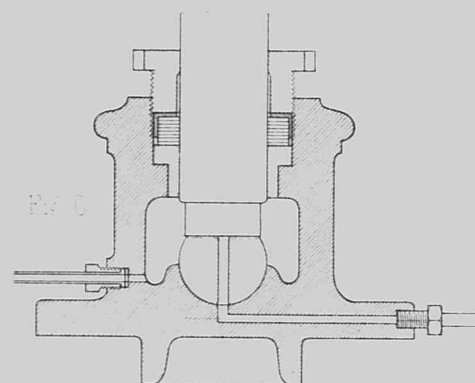
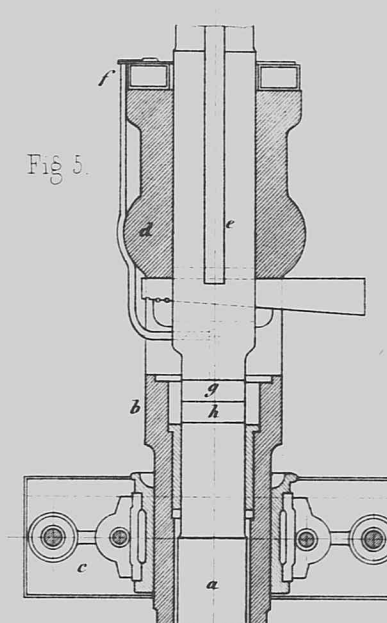
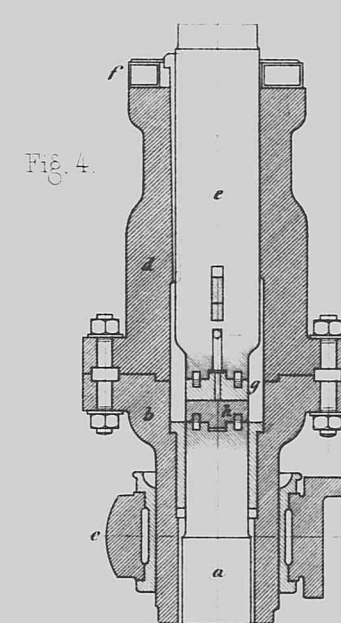
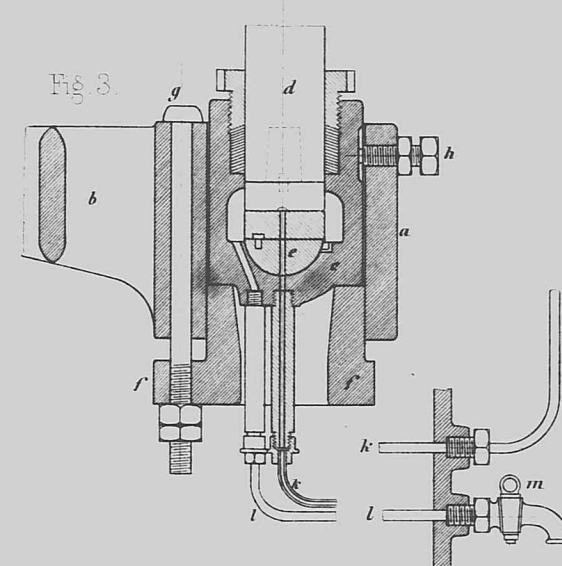
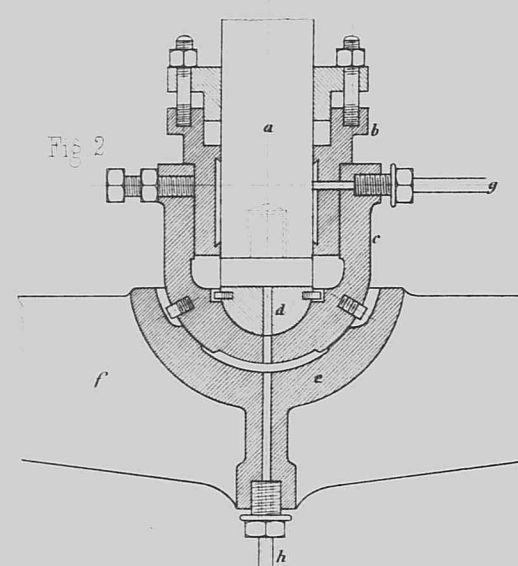
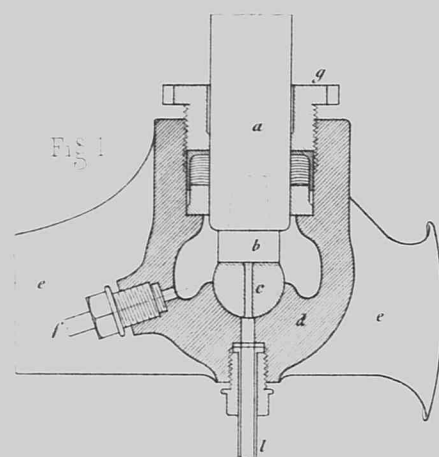
Fig. 3

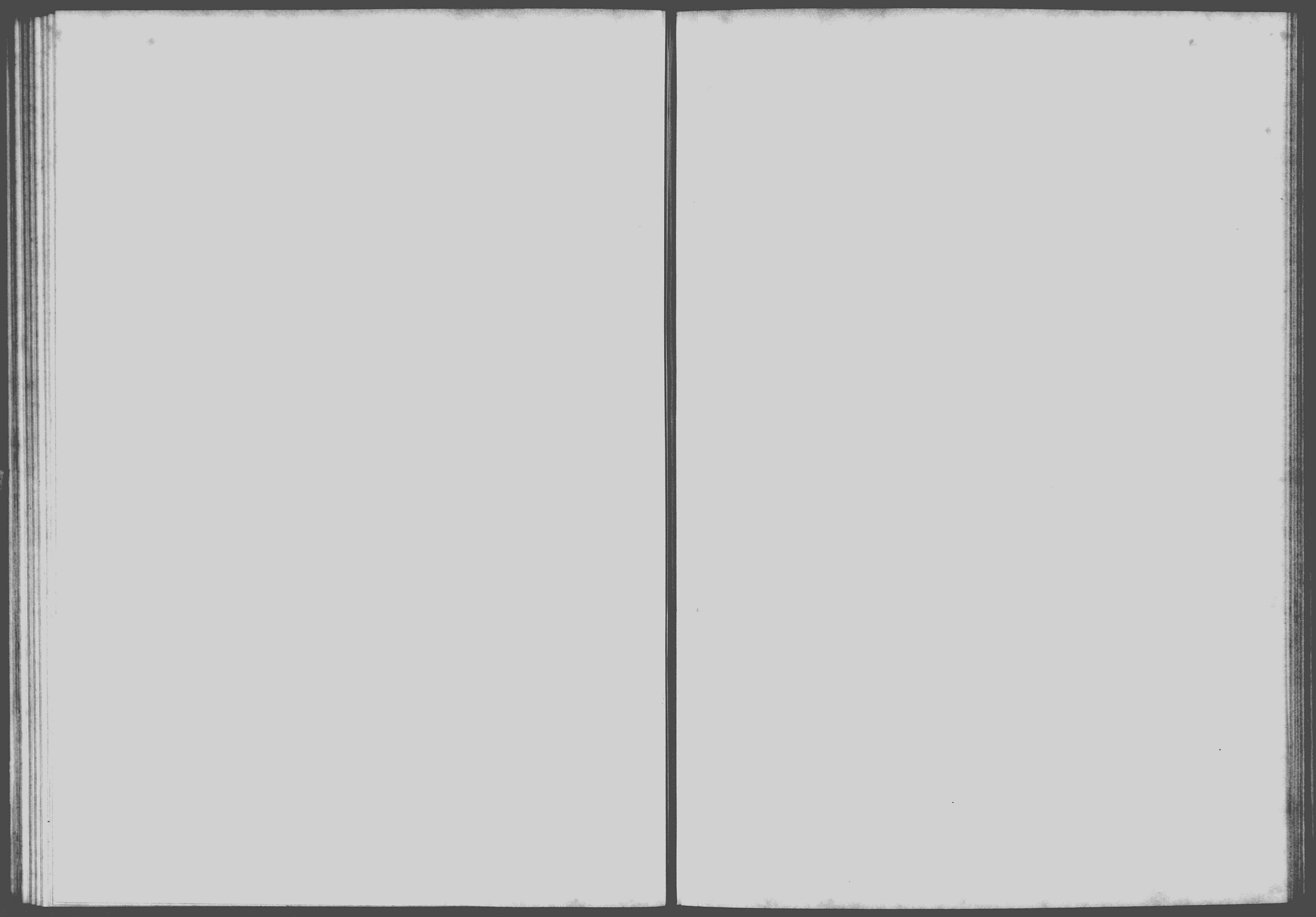
Fig. 2

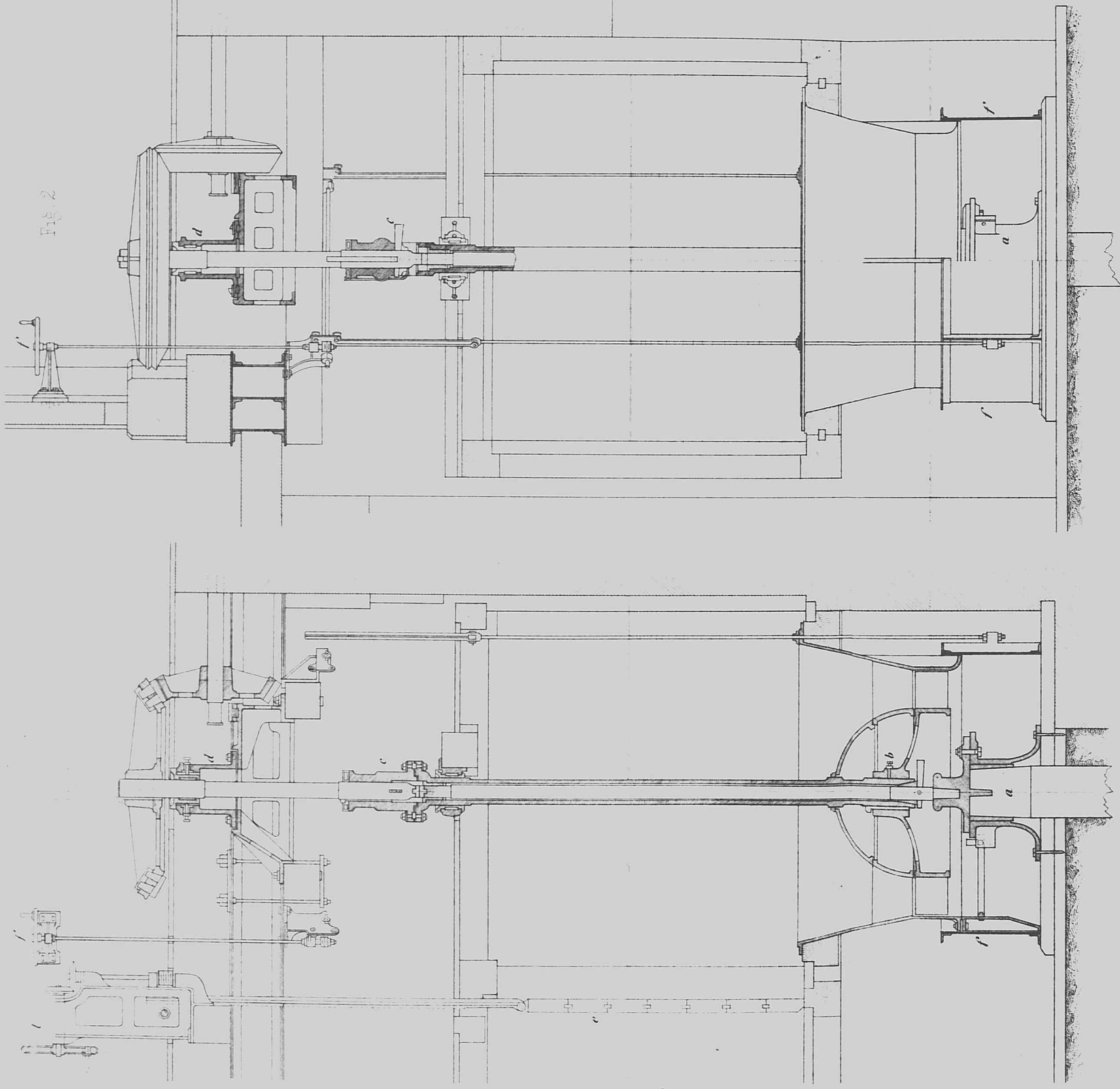
Fig. 1

Maassstab in Theilen des mittleren Halbmessers 1/2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22









Fr. 2

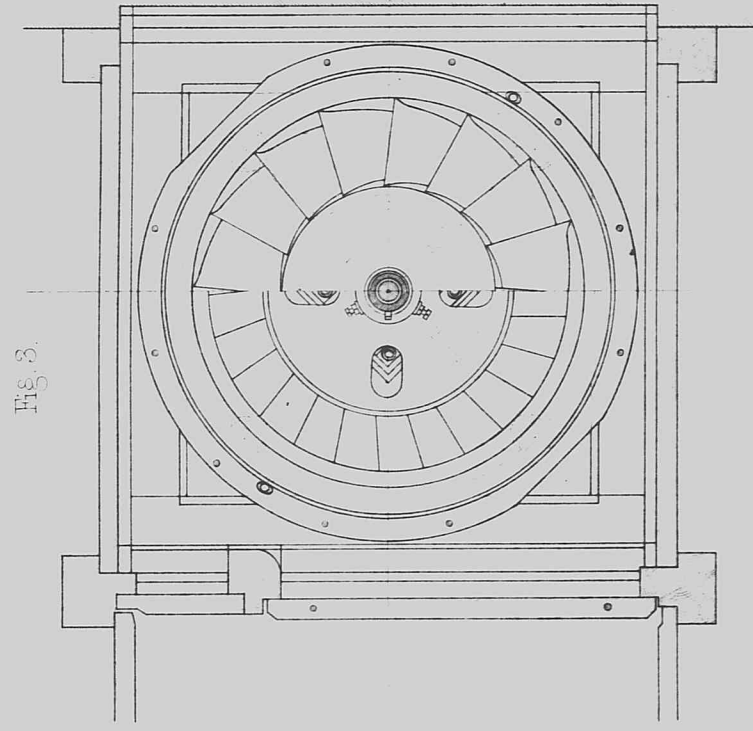


Fig. 3.

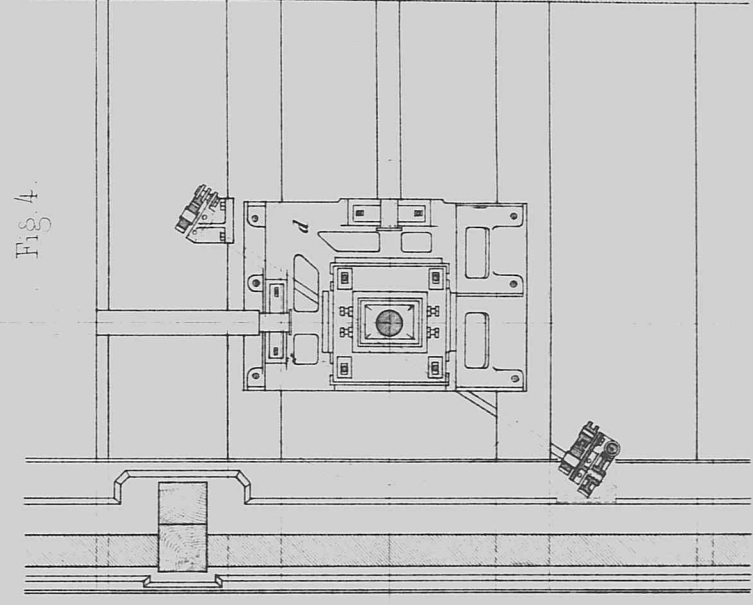
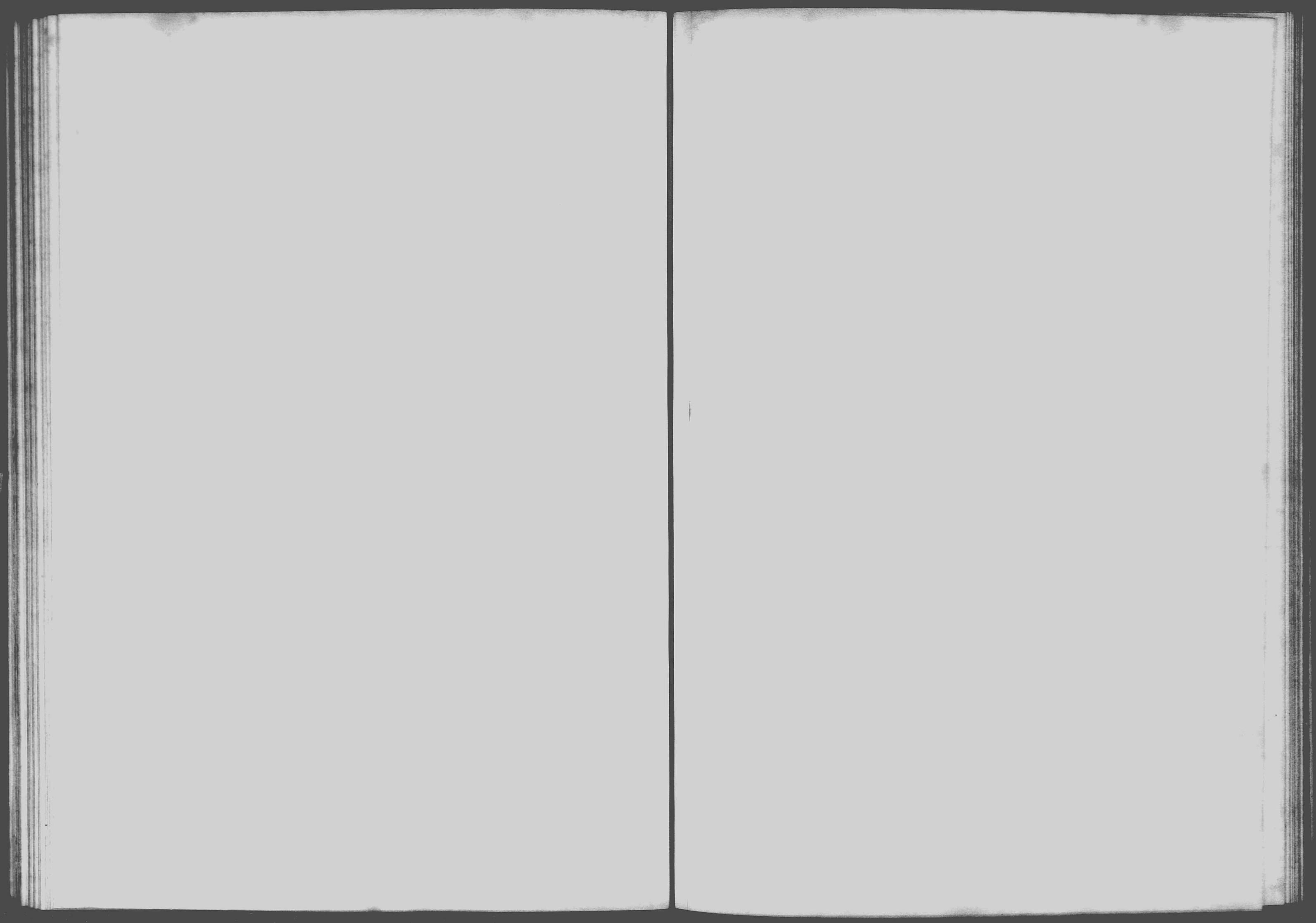


Fig. 4

Maafstab $\frac{1}{40}$ d. nat. Gr.



DISPOSITION DER TURBINEN BEI FREIBURG

Tafel XIV

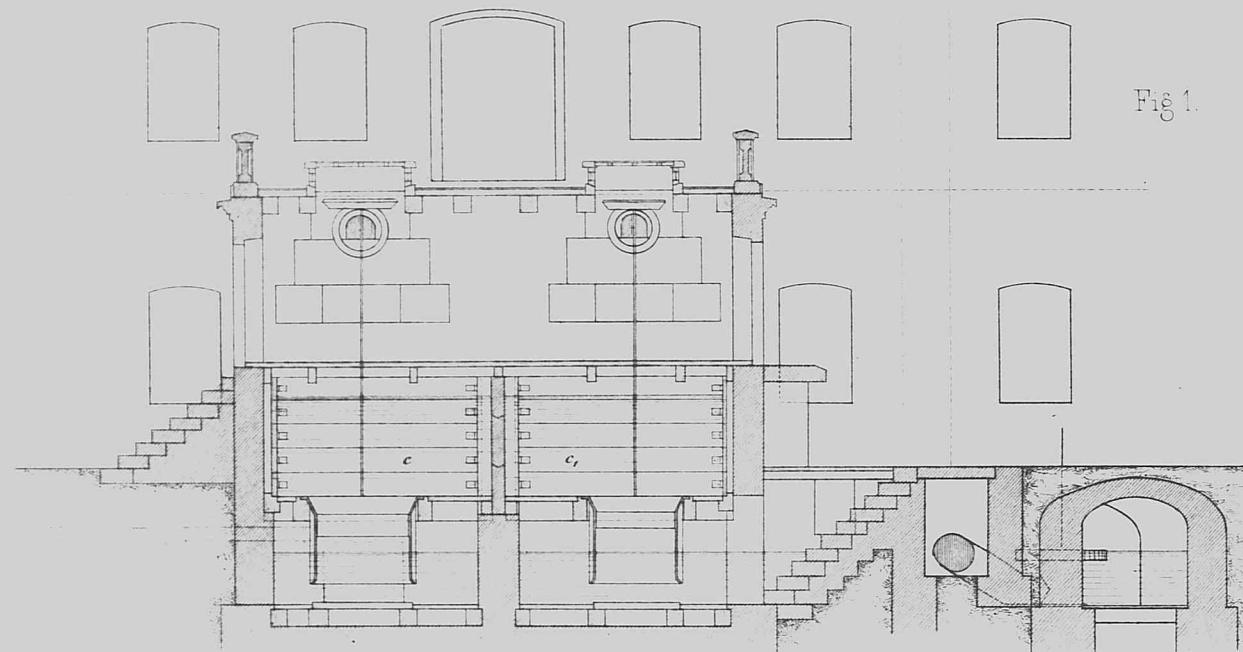


Fig. 1.

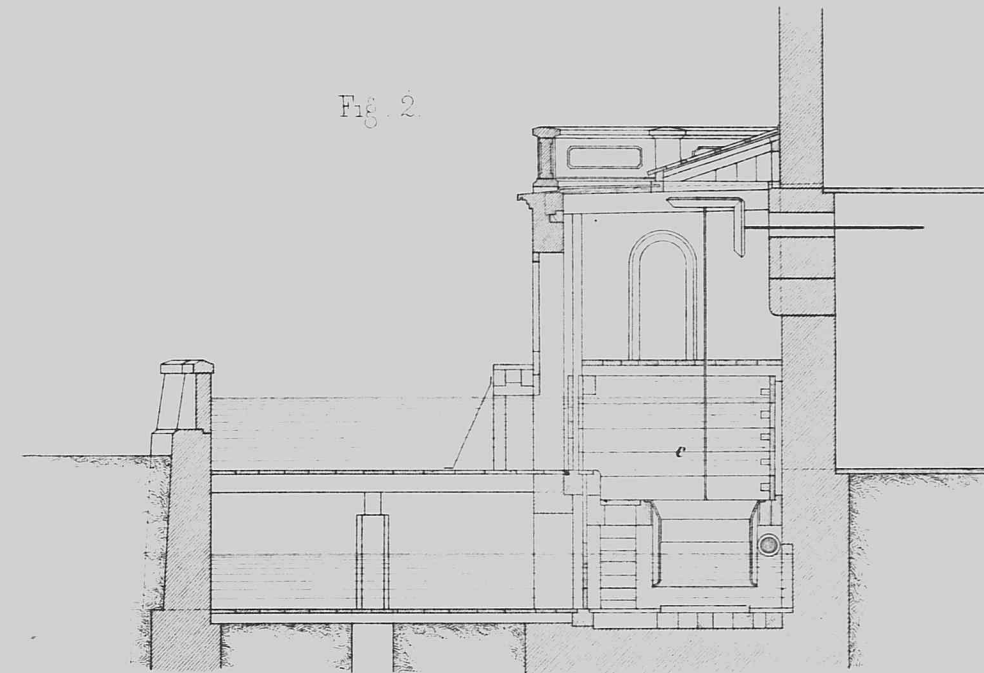


Fig. 2.

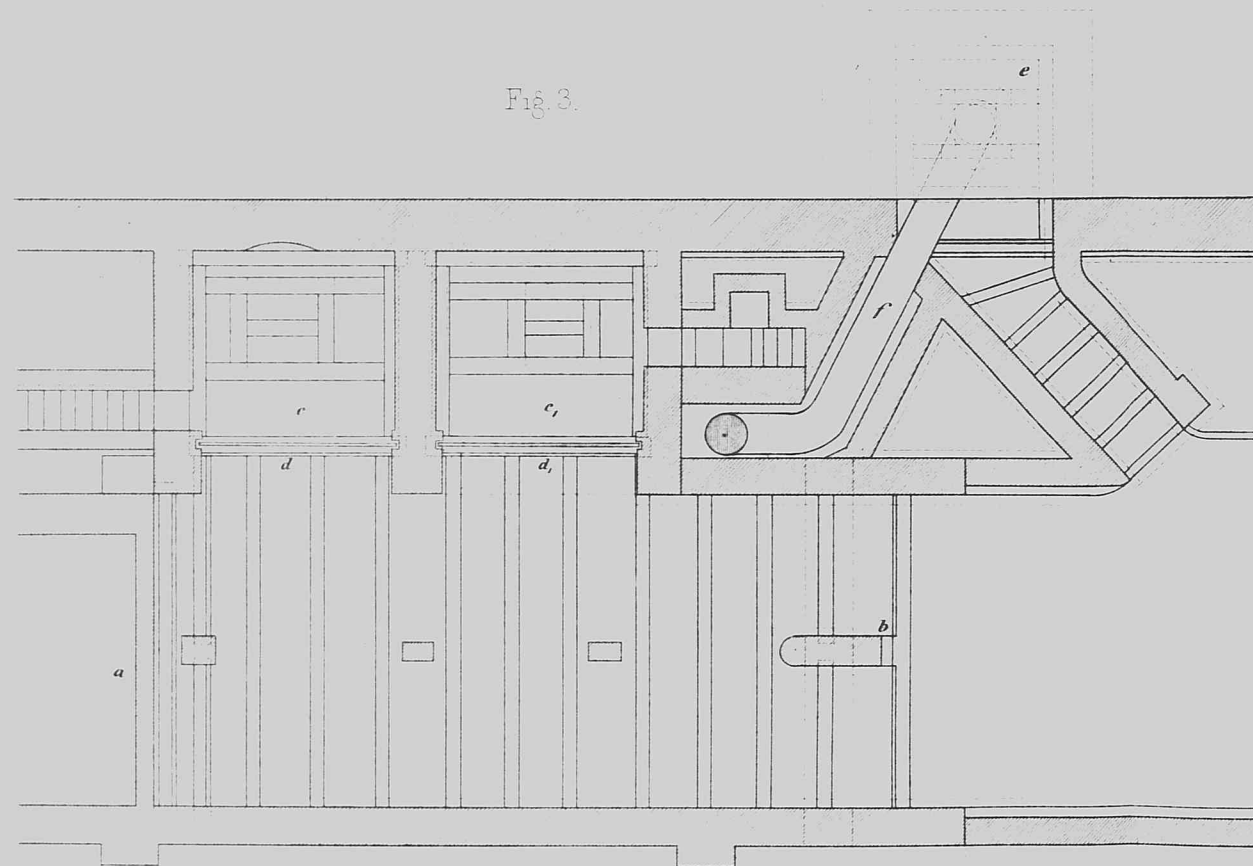


Fig. 3.

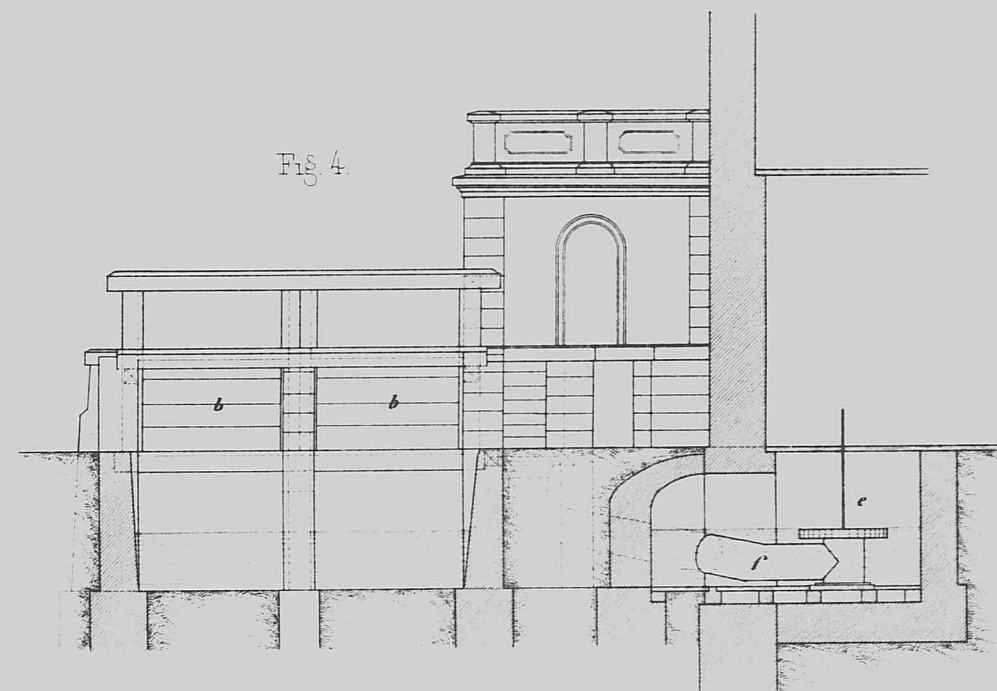
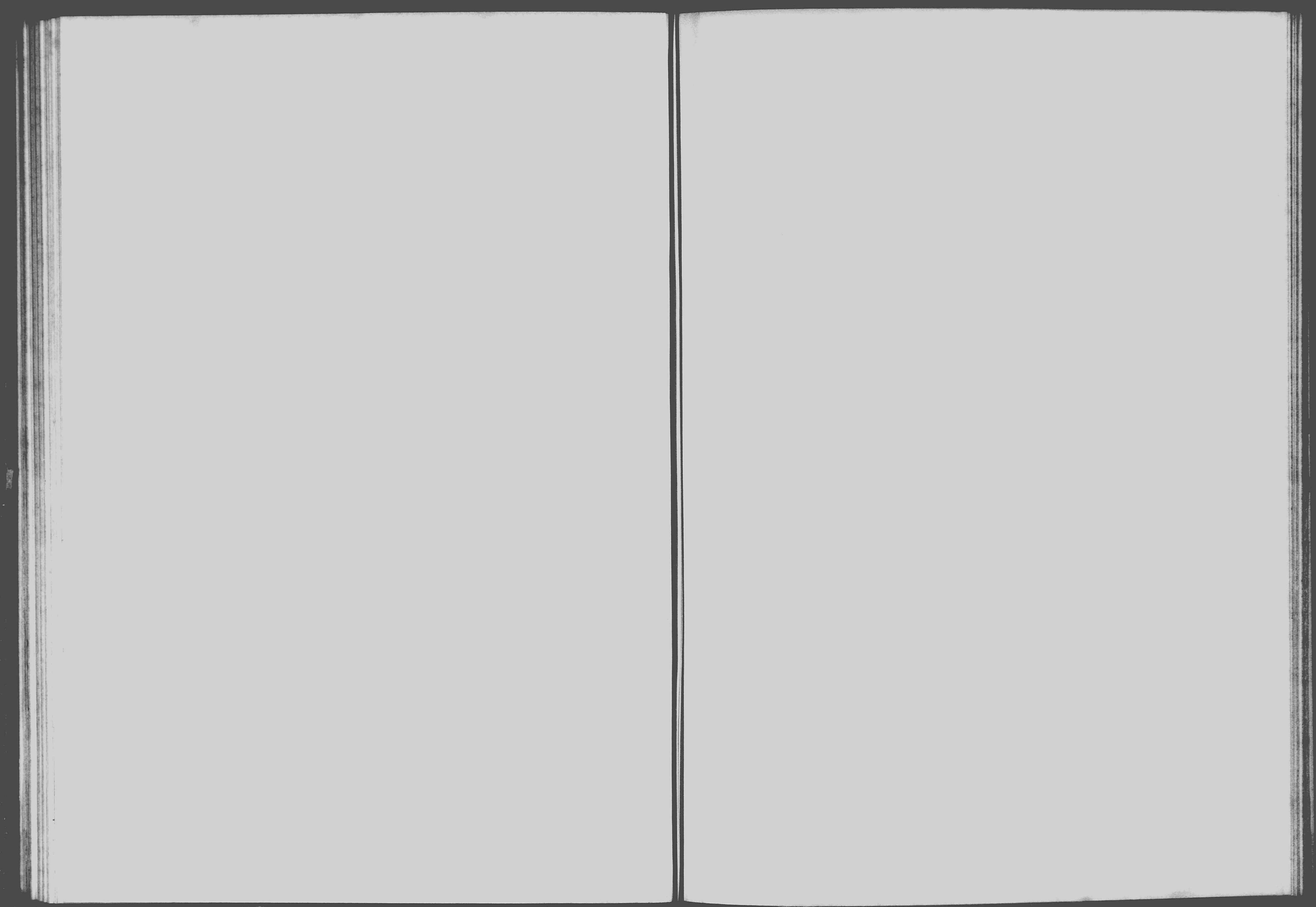
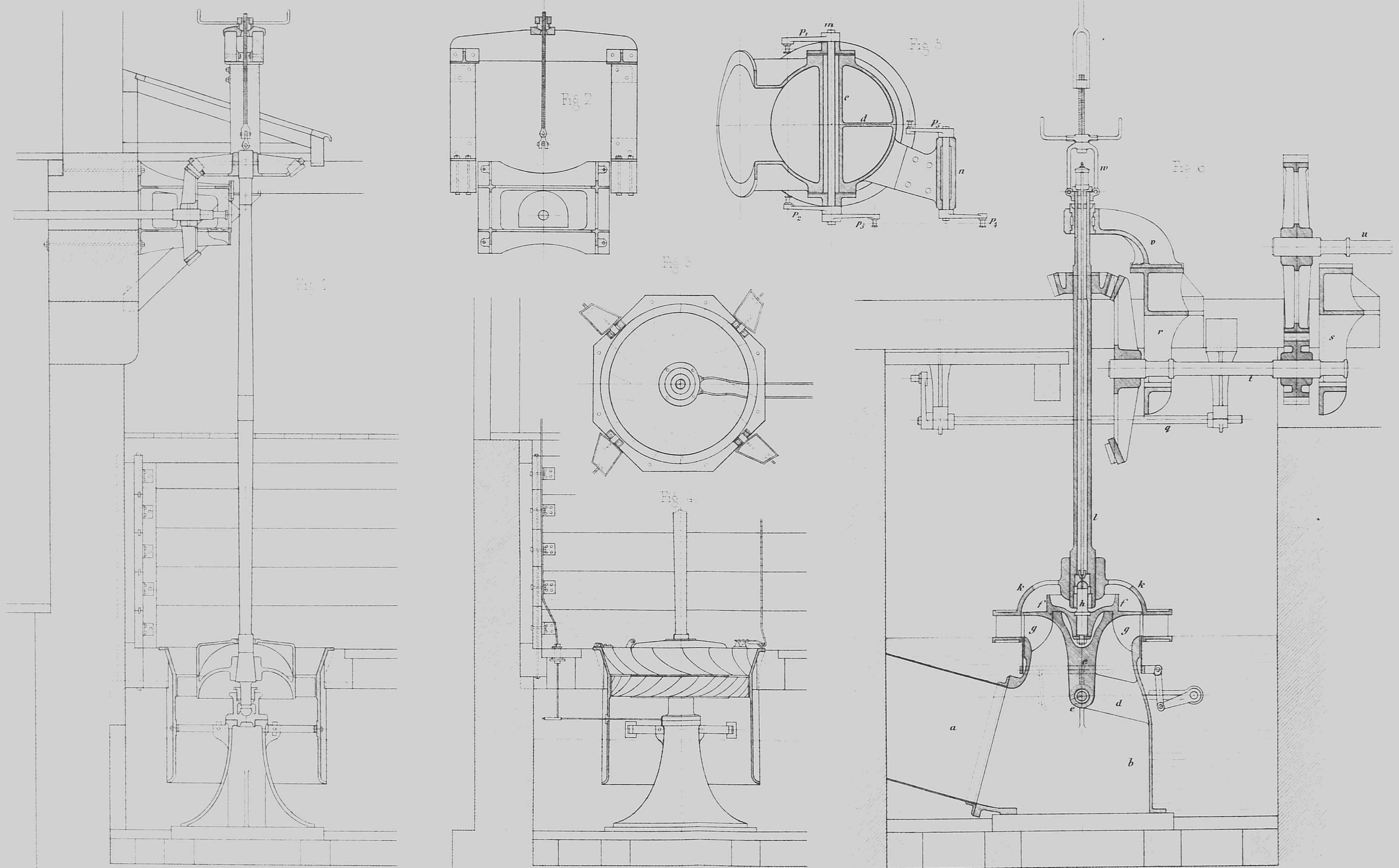


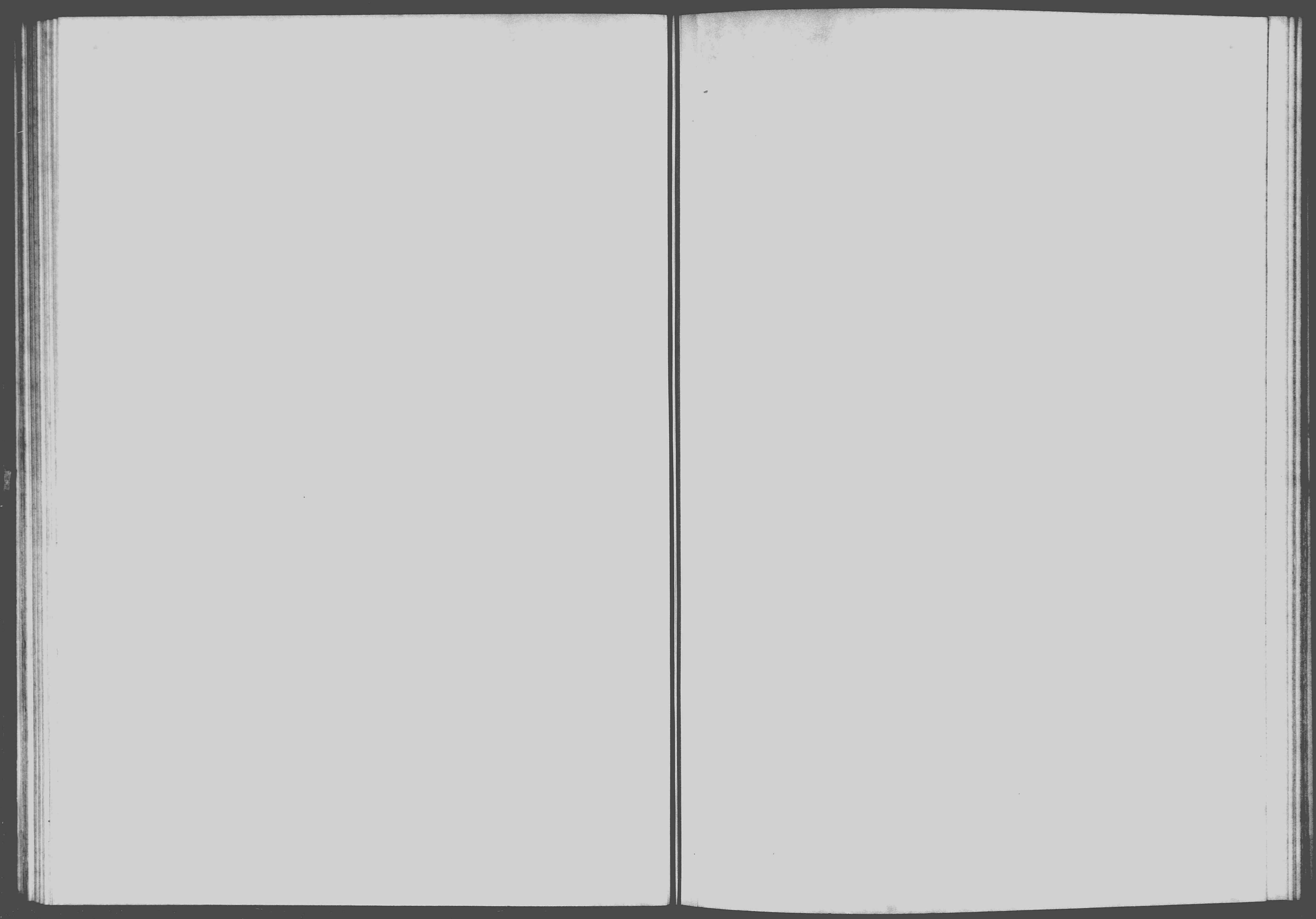
Fig. 4.

Maßstab 1:120 d. nat. Gr.
100 50 0 1 2 3 4 5 6 met



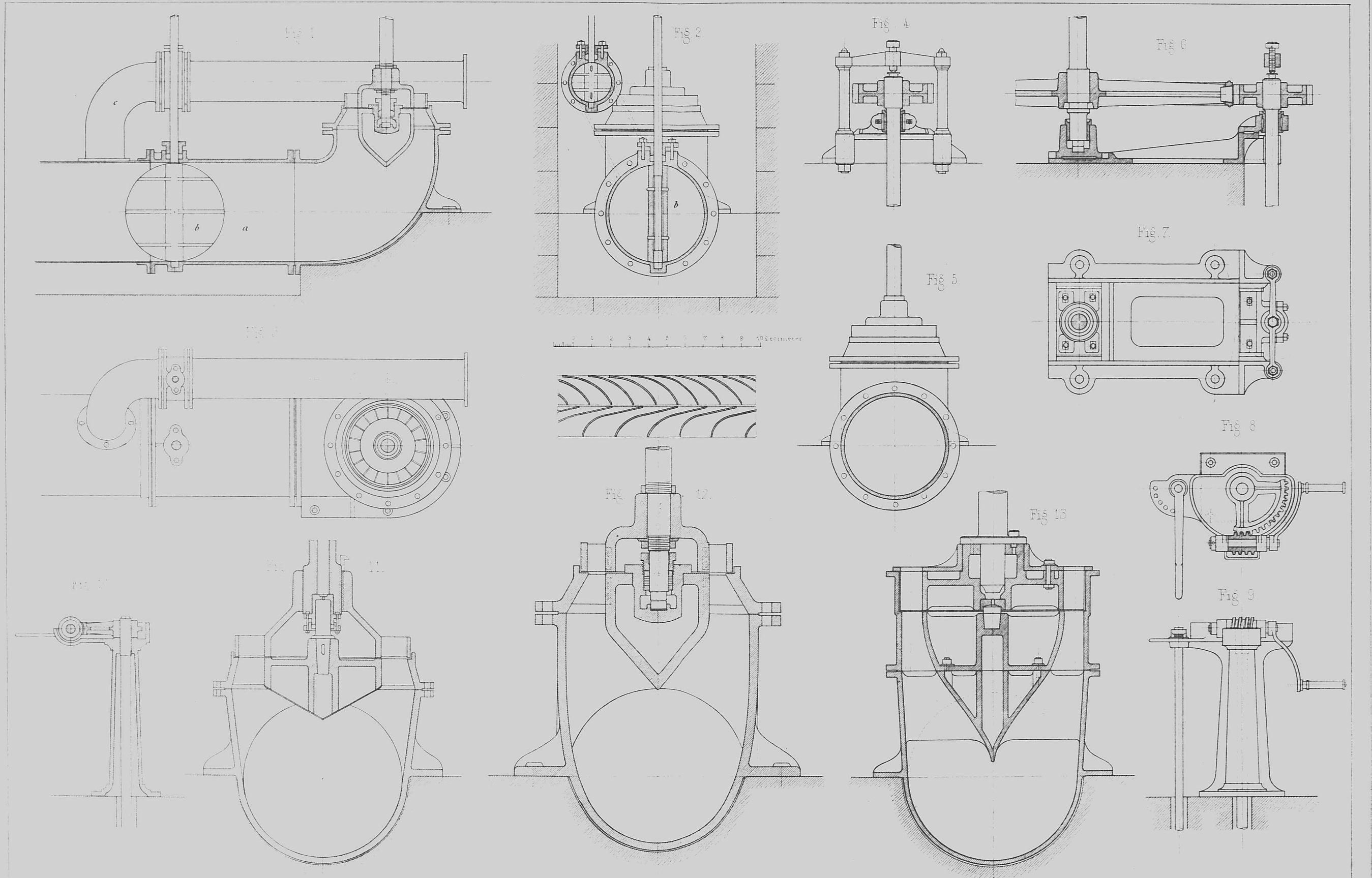


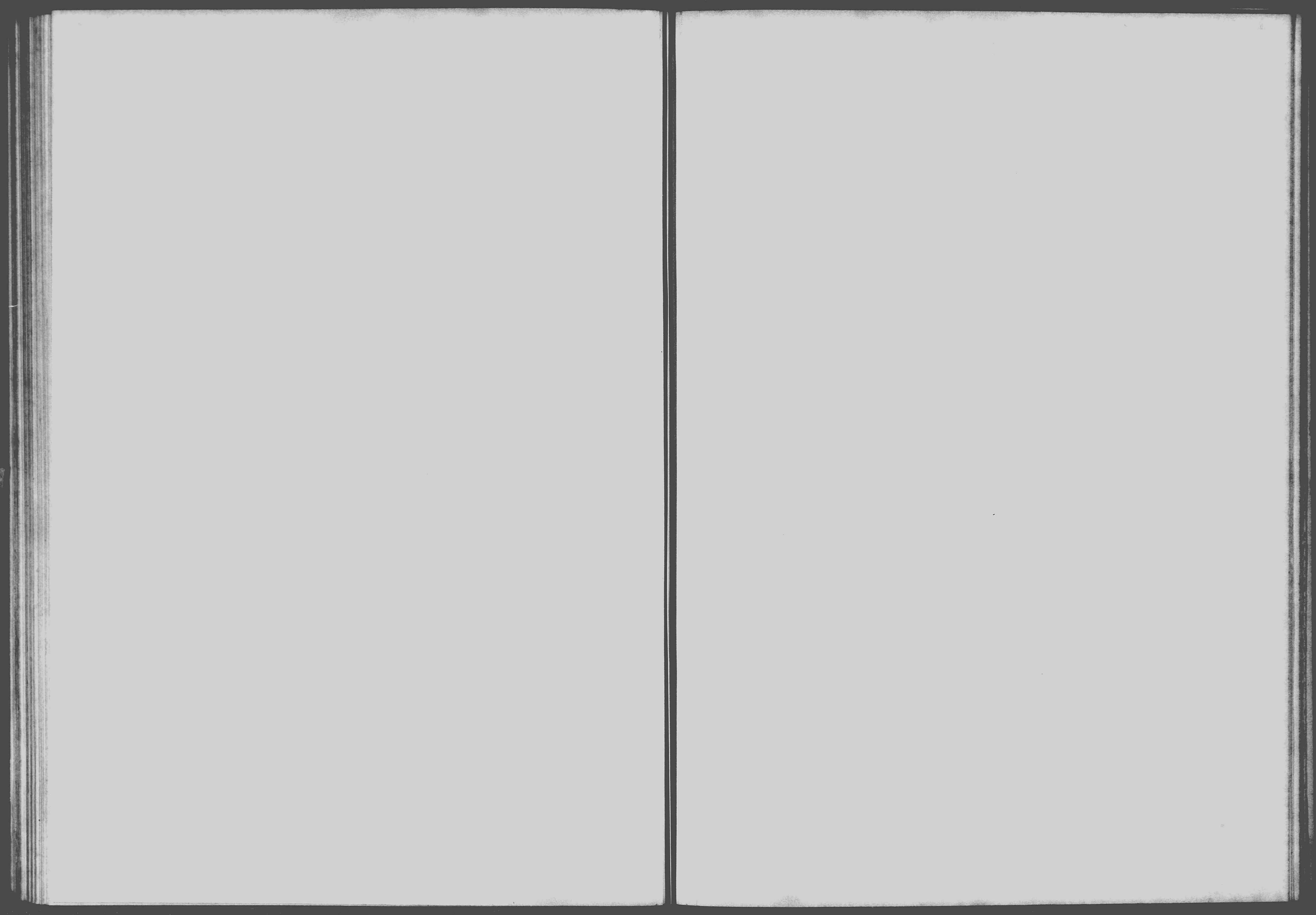
120 inch Gr
10 20 30 40 50 60 70 80 90 100 110 120 inch



JONVAL'SCHE TURBINEN. UMGEKEHRTE AUFSTELLUNG.

Tafel XVI.





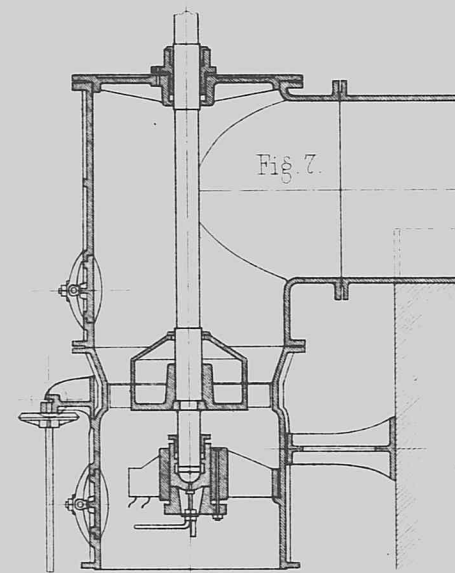
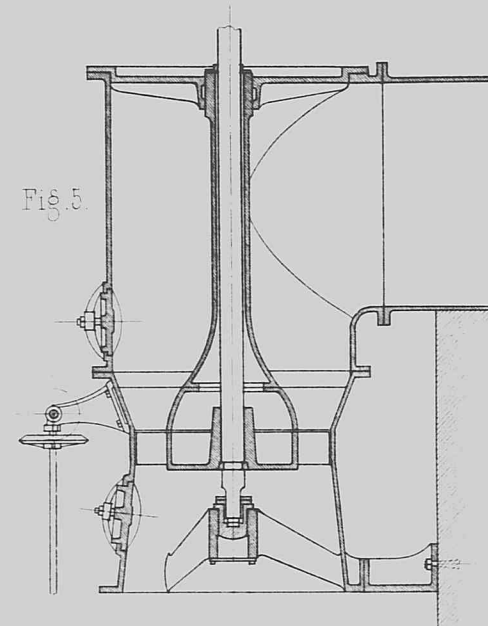
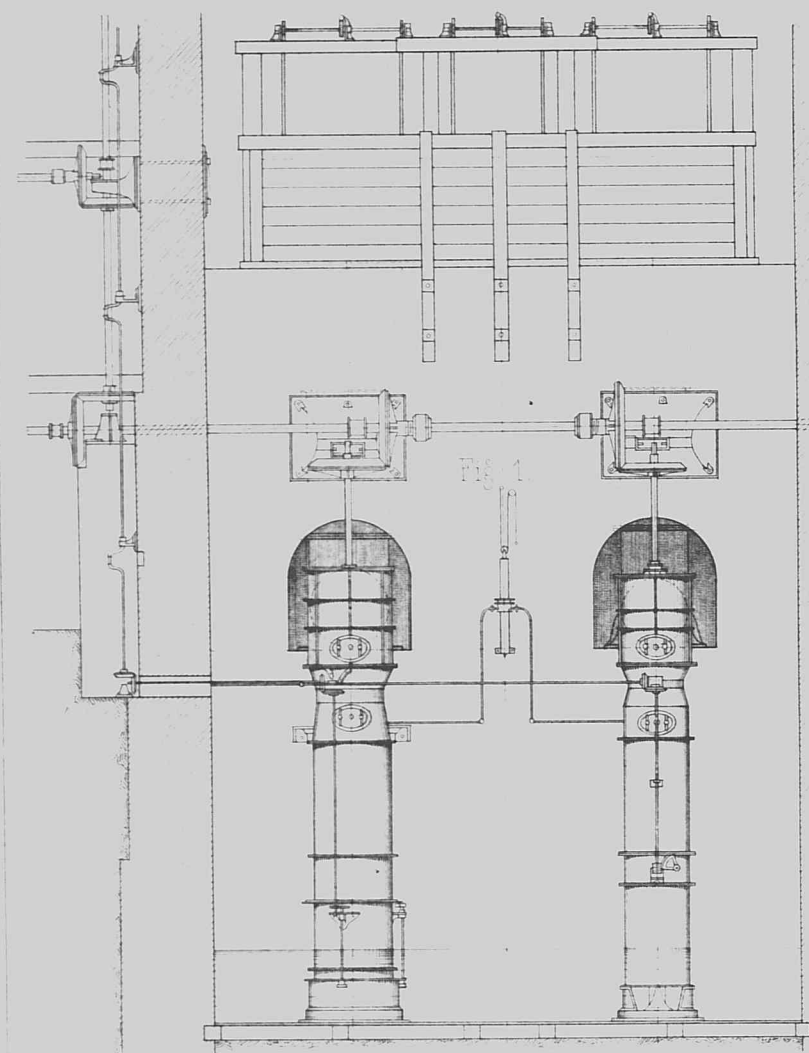


Fig. 17

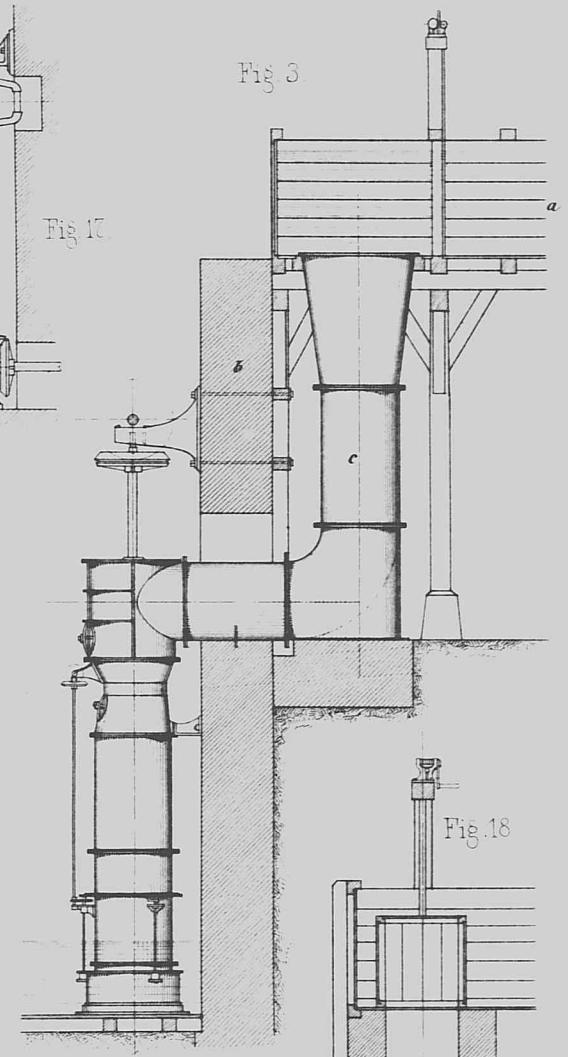


Fig. 3

Fig. 18

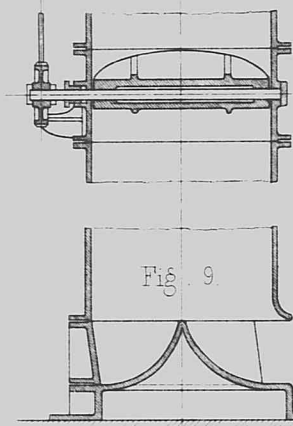
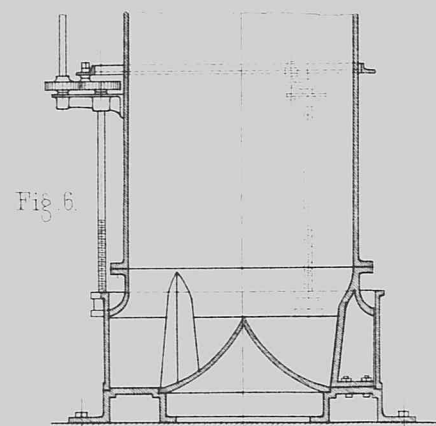


Fig. 8

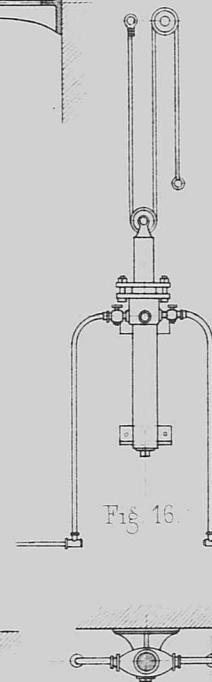


Fig. 16

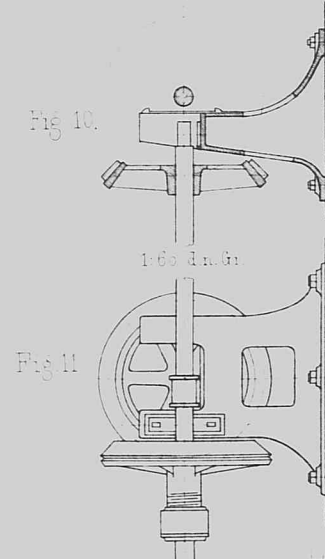
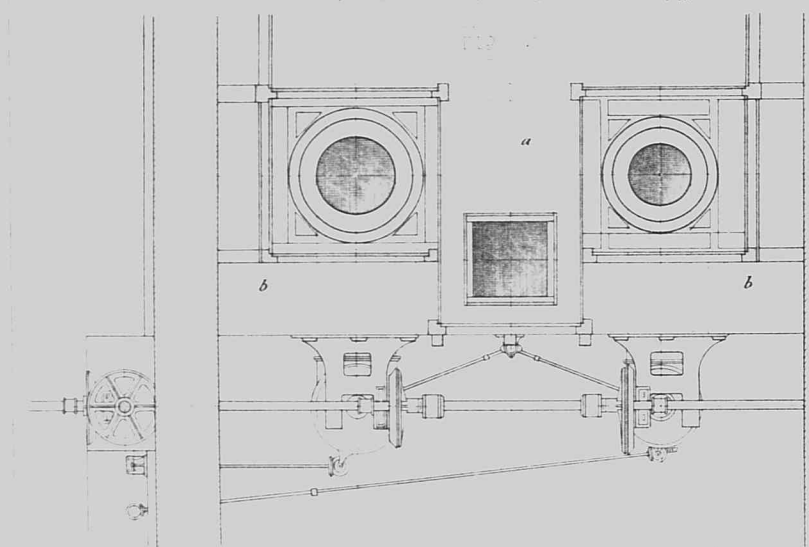


Fig. 10

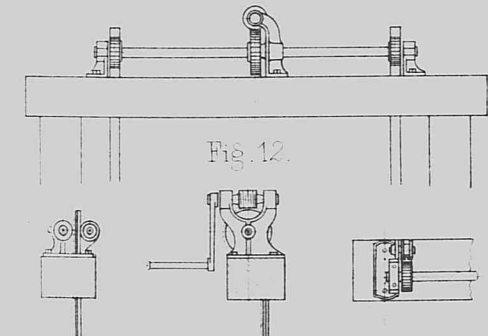


Fig. 12

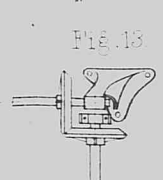


Fig. 13

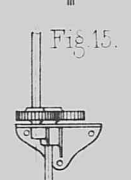


Fig. 15

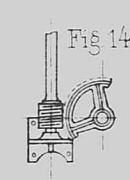


Fig. 14

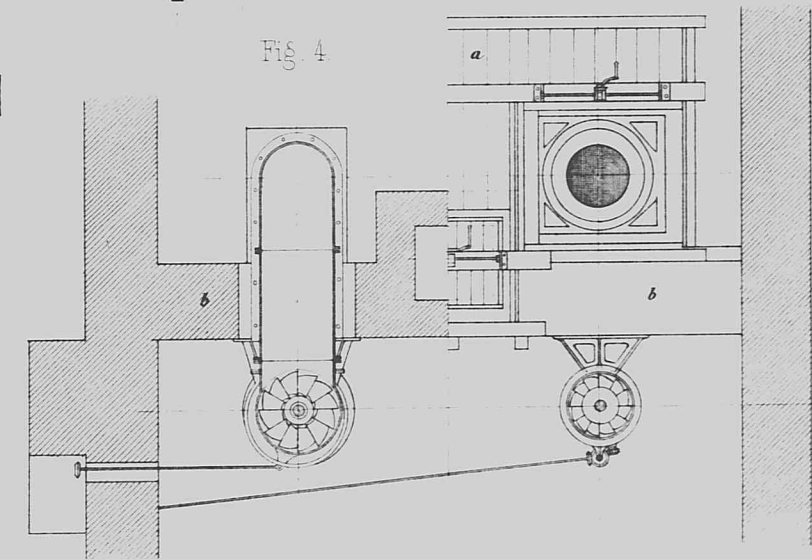
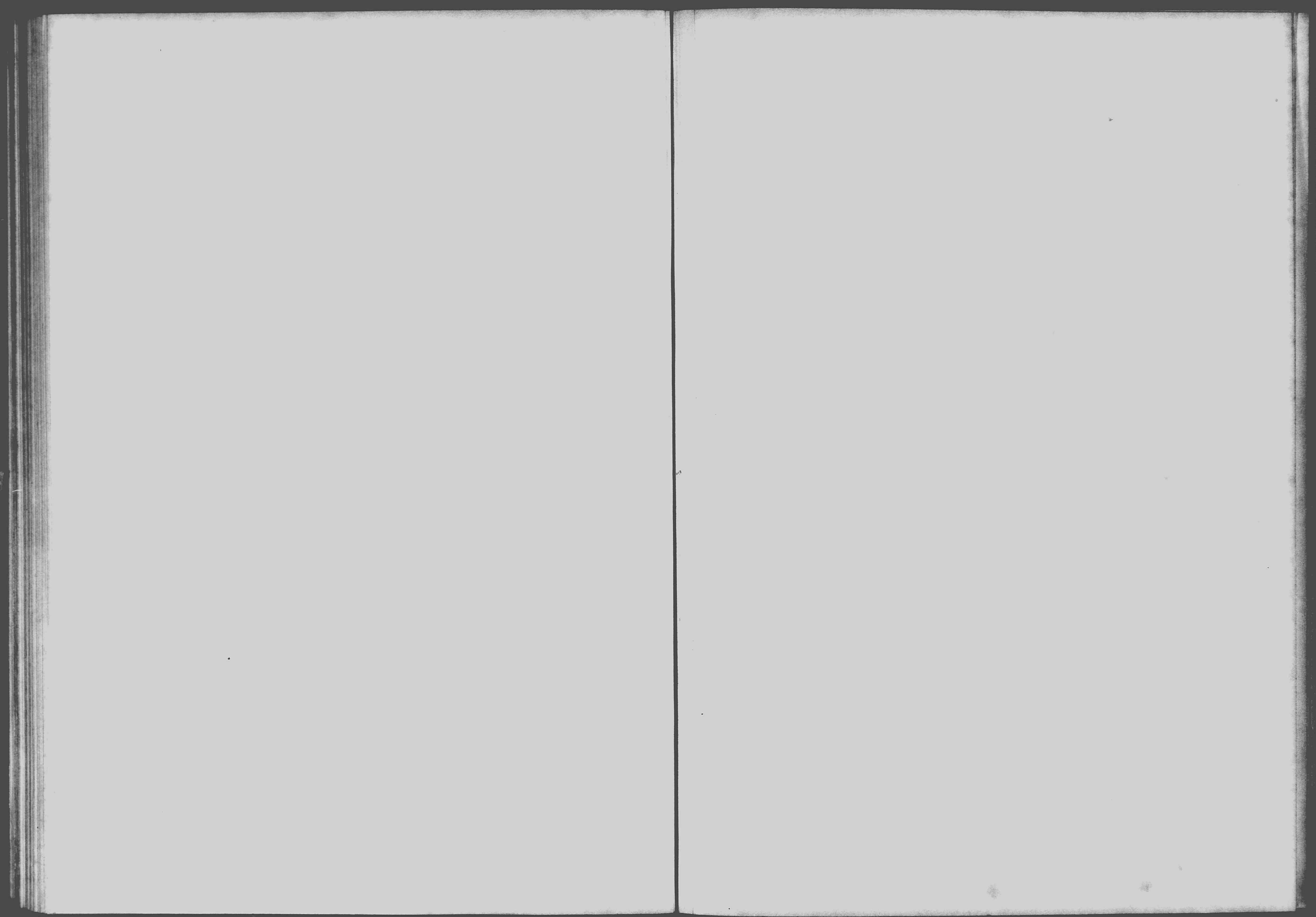


Fig. 4

1:60 d. nat. Gr.
1:40 d. nat. Gr.
1:20 d. nat. Gr.
1:10 d. nat. Gr.



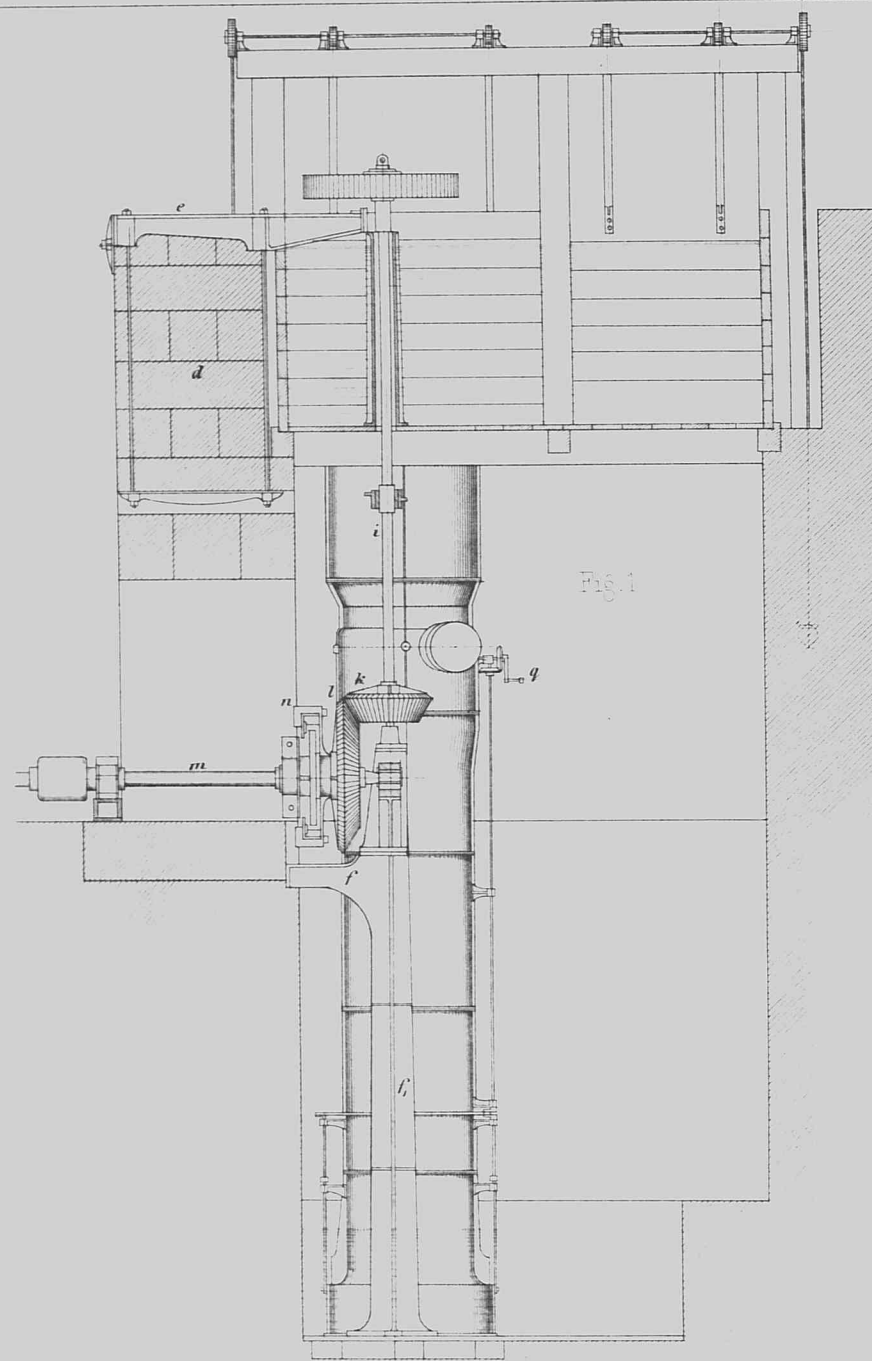


Fig. 1

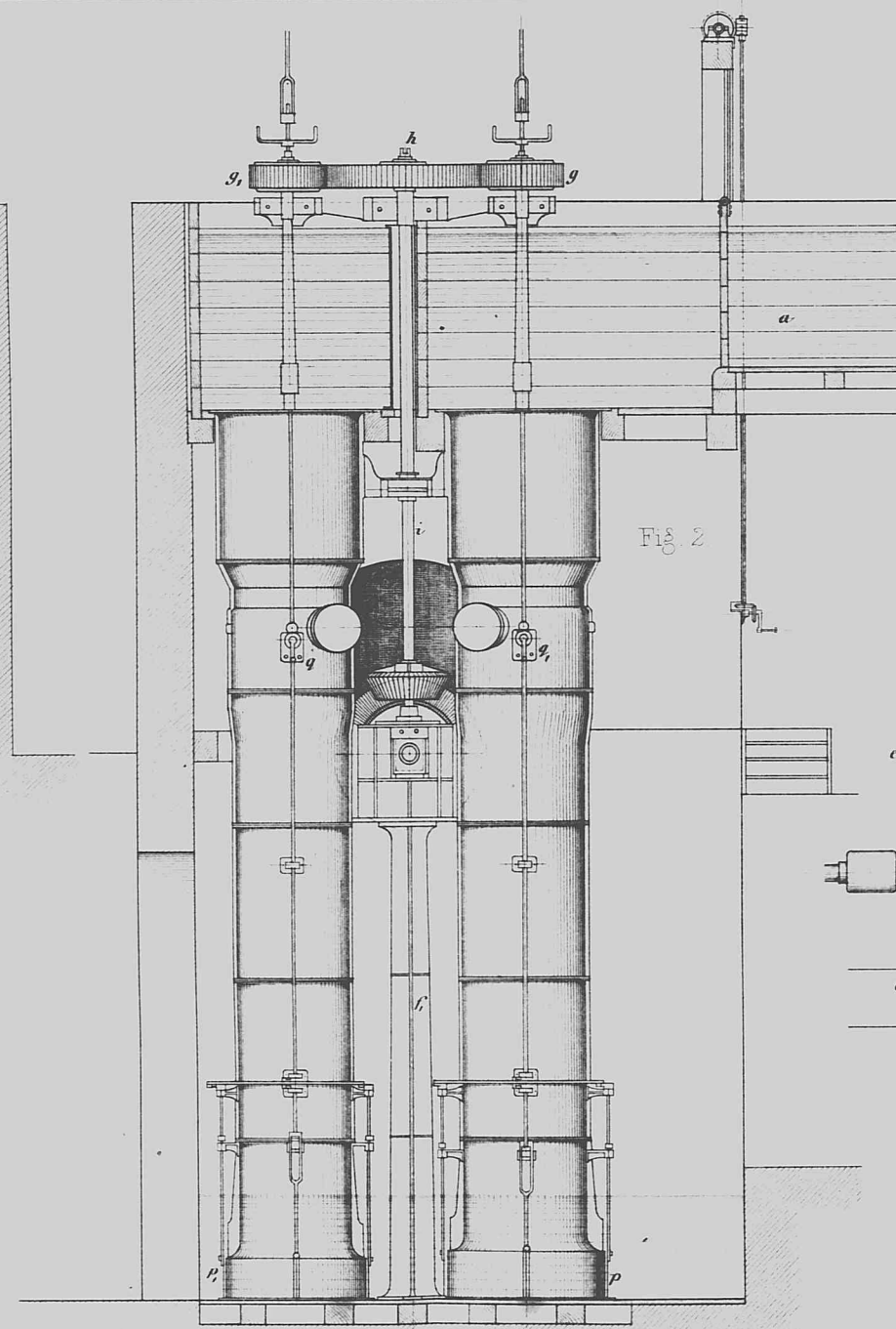


Fig. 2

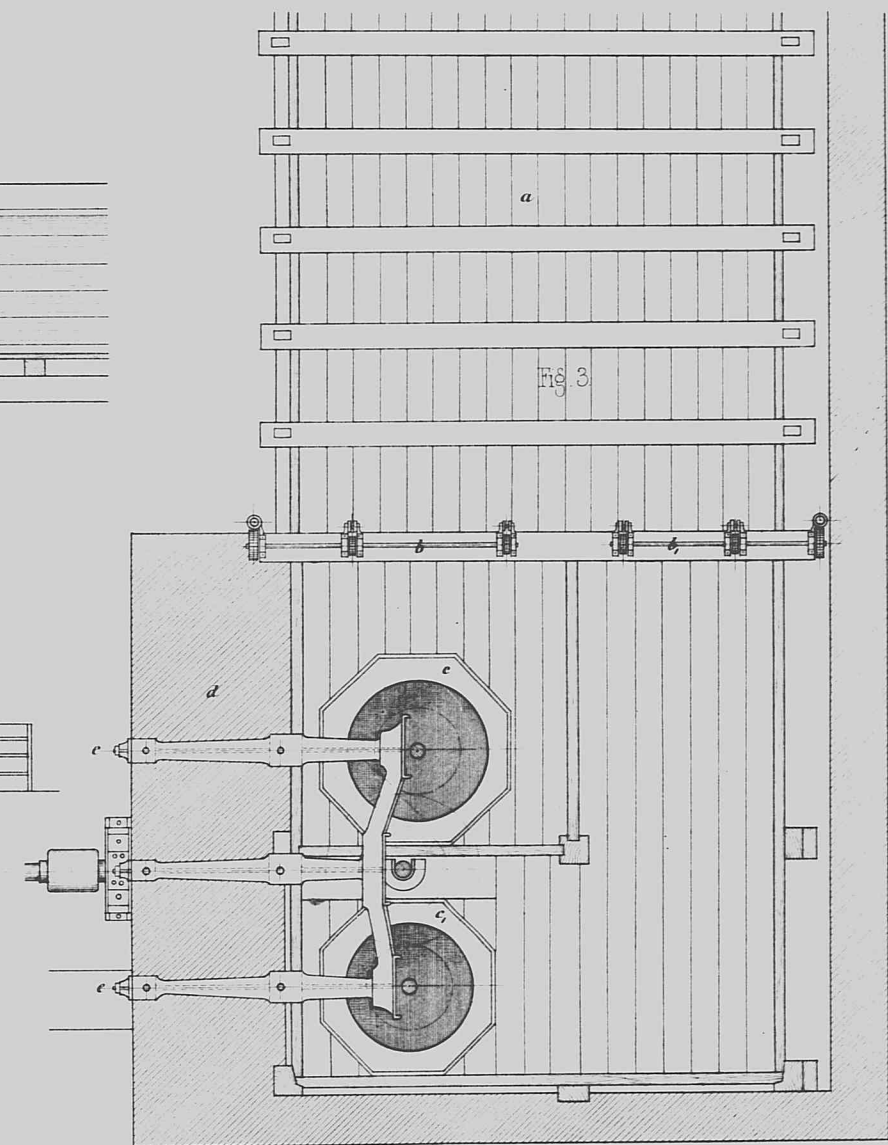


Fig. 3

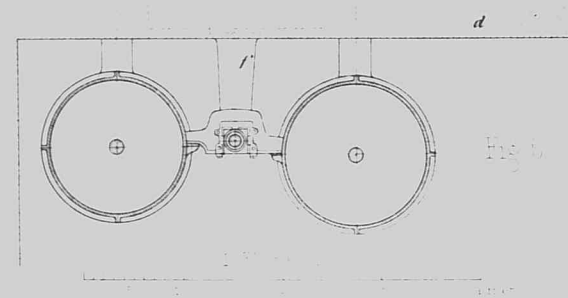


Fig. 4

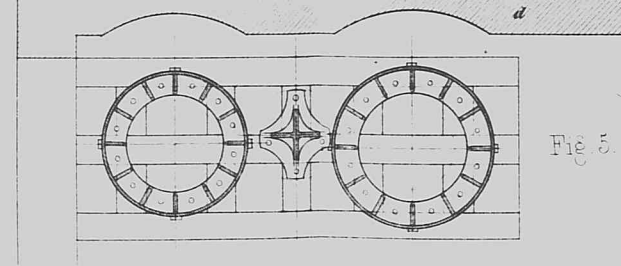


Fig. 5

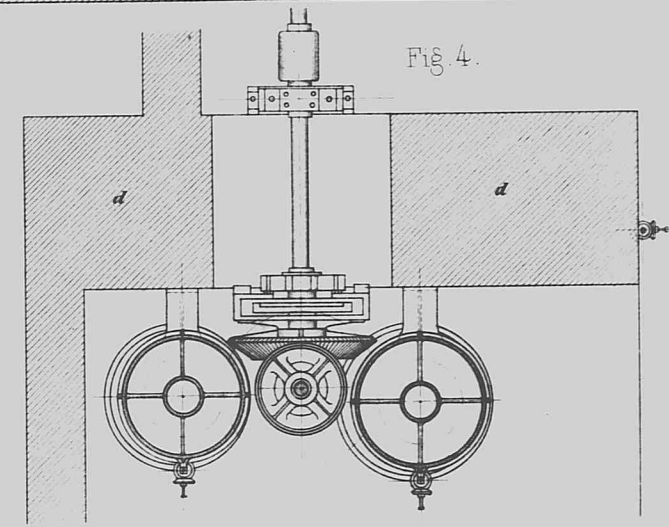
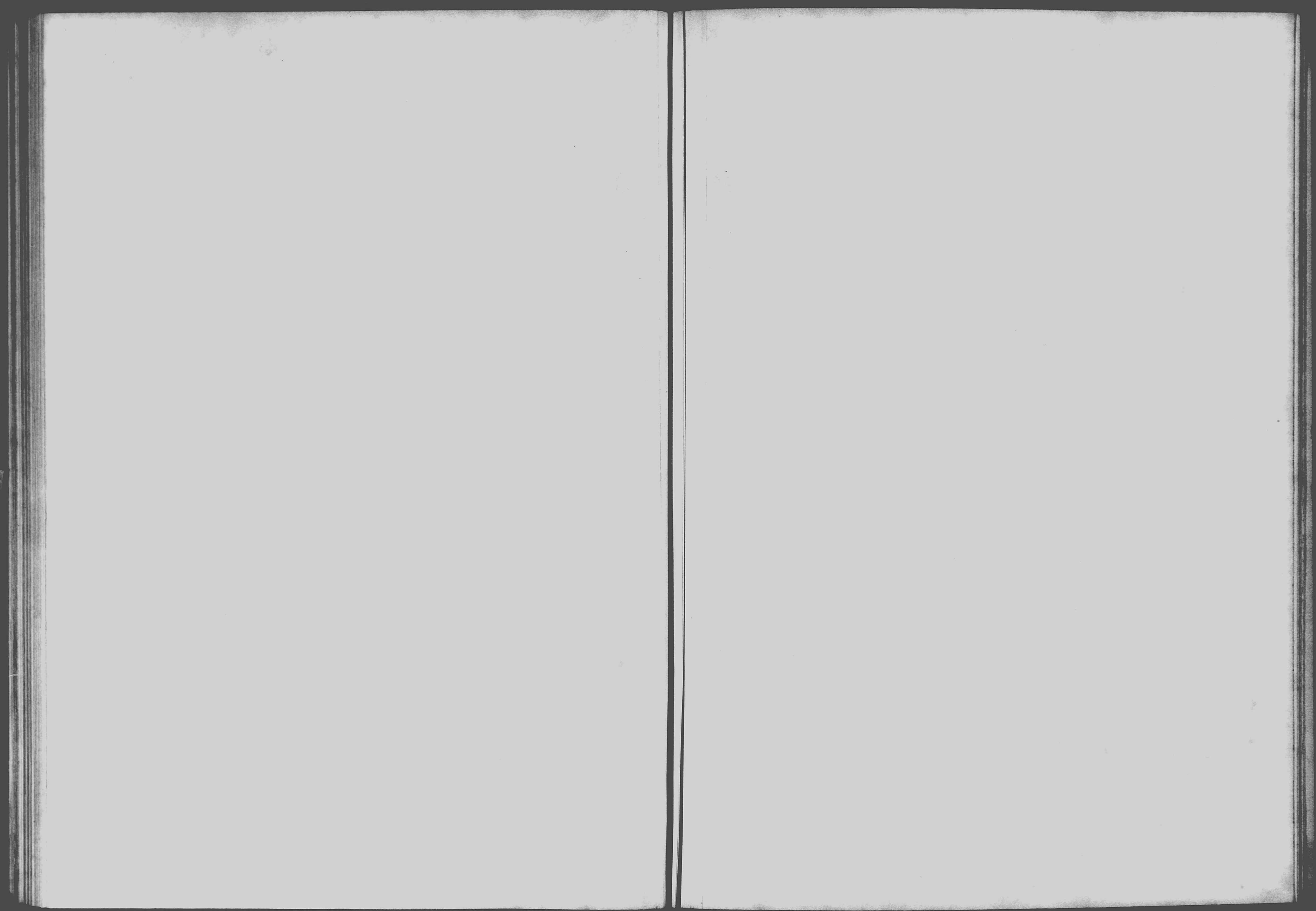
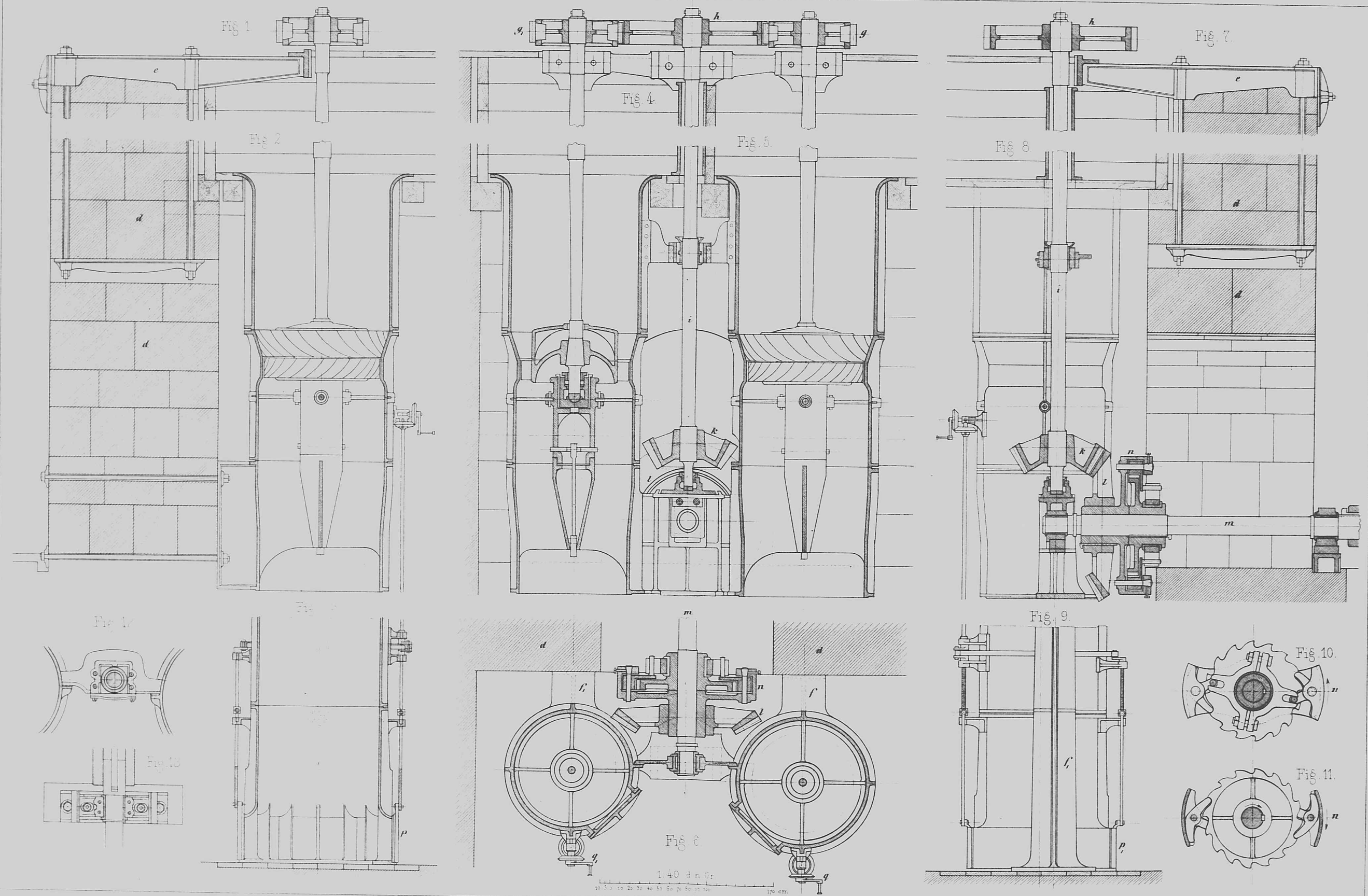


Fig. 6



DETAILS DER TURBINEN IN DER SPINNEREY BEI ETTLINGEN

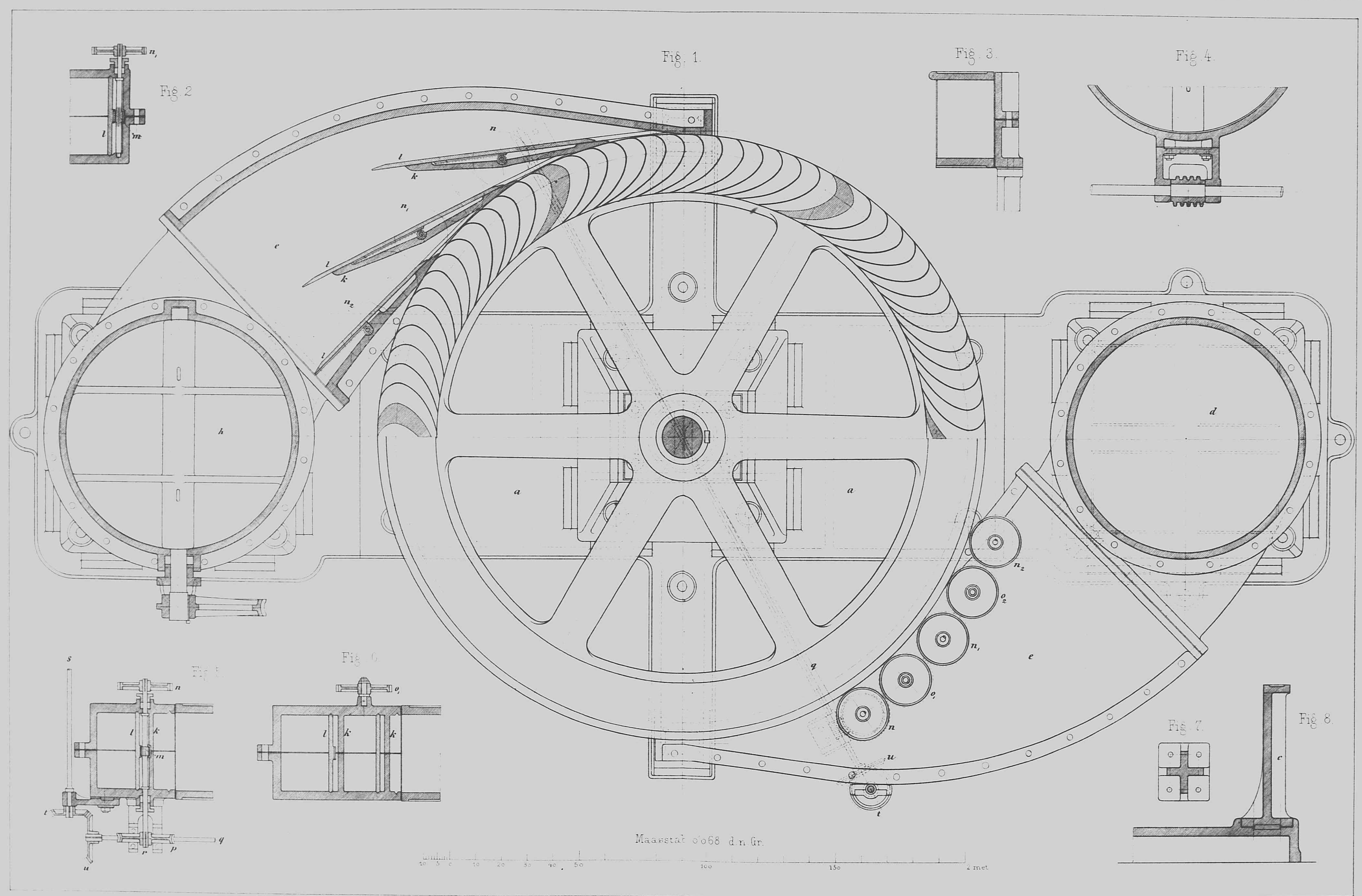
Tafel XIX

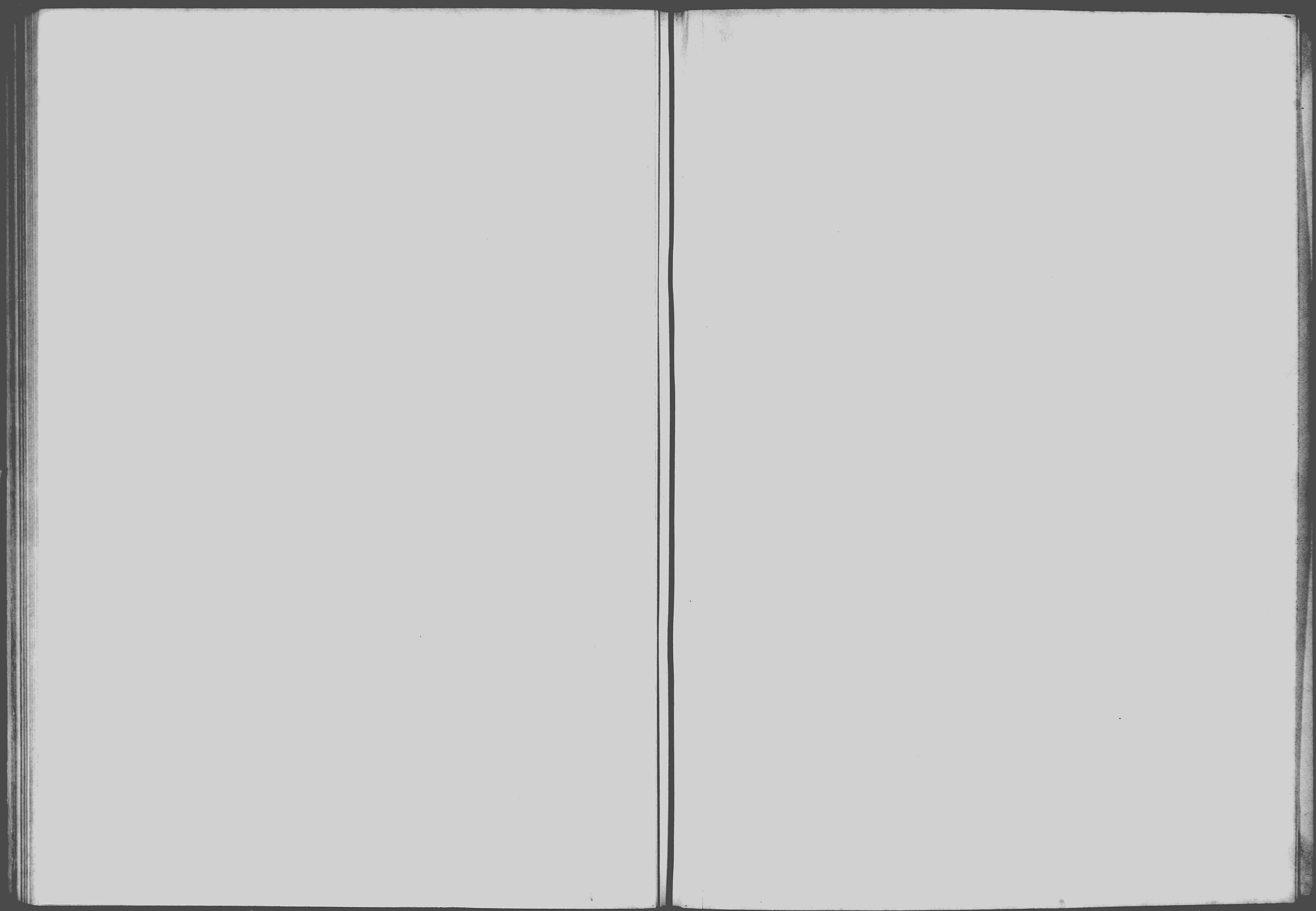




TANGENTIAL-RAD MIT ZWEI EINLÄUFEN.

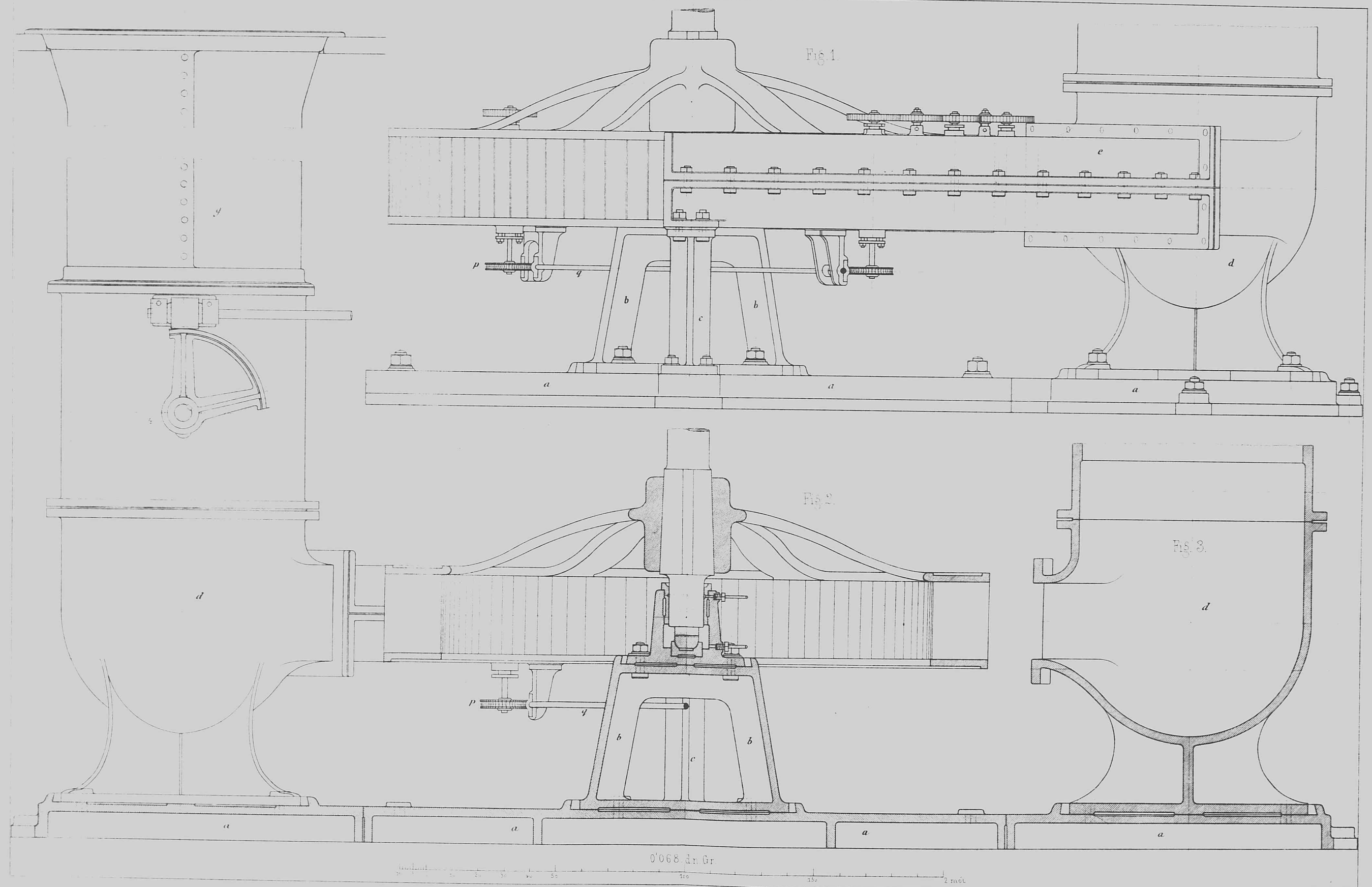
Tafel XX.

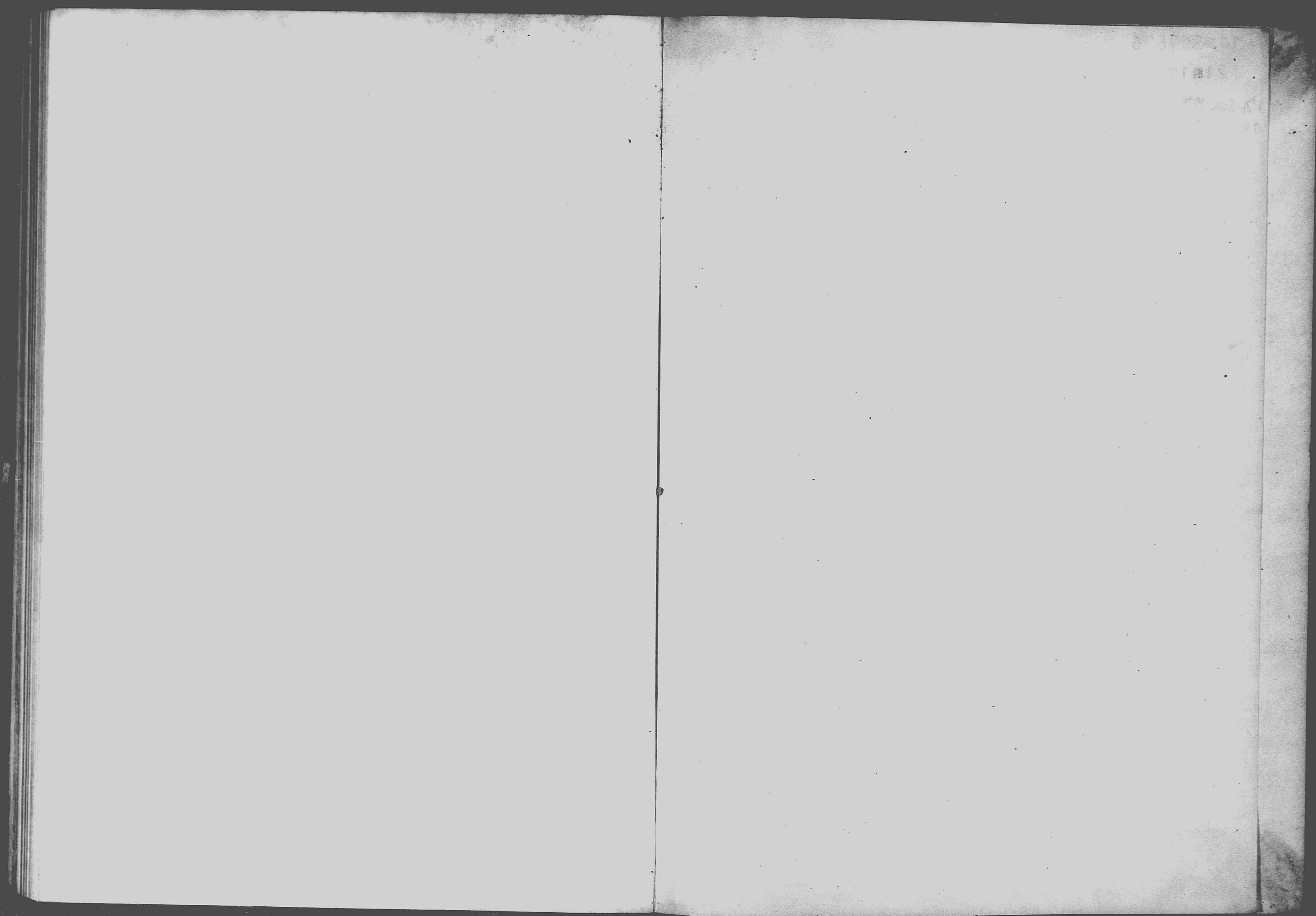




TANGENTIAL-RAD MIT ZWEI EINLÄUFEN

Tafel XXI





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