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A T L A S

ZUR

THEORETISCHEN KINEMATIK

Holzstiche
aus dem xylographischen Atelier
von Friedrich Vieweg und Sohn
in Braunschweig.

Papier
aus der mechanischen Papier-Fabrik
der Gebrüder Vieweg zu Wendhausen
bei Braunschweig.

A T L A S

ZUR

THEORETISCHEN KINEMATIK

VON

FRANZ
F. REULEAUX
" Professor

Direktor der Königl. Gewerbe-Akademie in Berlin, Mitglied der Königl.
technischen Deputation für Gewerbe

ACHT FIGURENTAFELN

BRAUNSCHWEIG,

DRUCK UND VERLAG VON FRIEDRICH VIEWEG UND SOHN.

1875.

Handwritten notes in the top left corner, possibly including a date and a name, but they are illegible due to fading and bleed-through.

Die Herausgabe einer Uebersetzung in französischer und englischer Sprache,
sowie in anderen modernen Sprachen wird vorbehalten.

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29 Jan 30 A. A. S.

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Fig. 1.

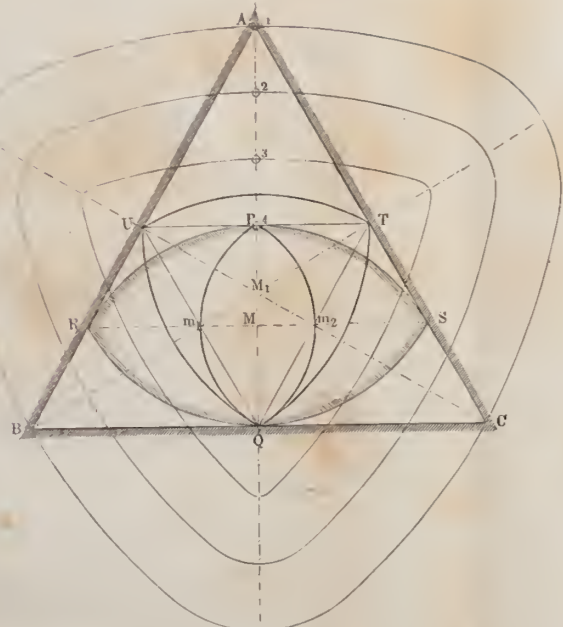


Fig. 2.

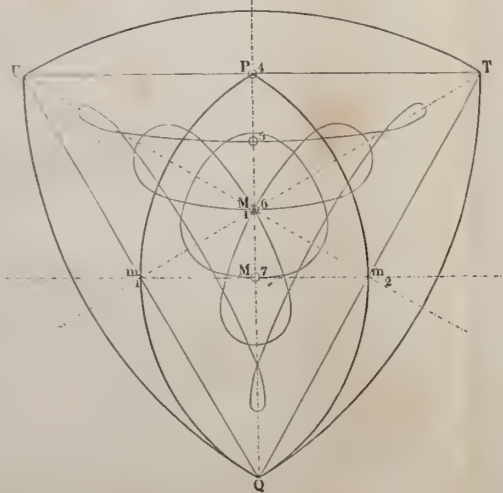


Fig. 3.



Fig. 4.

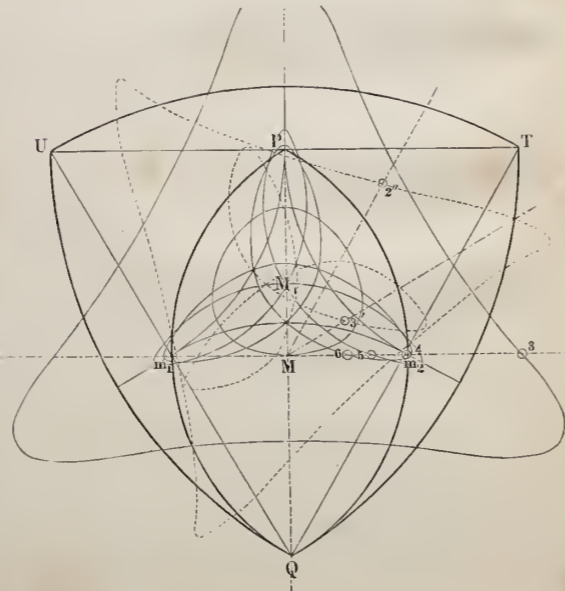


Fig. 5.

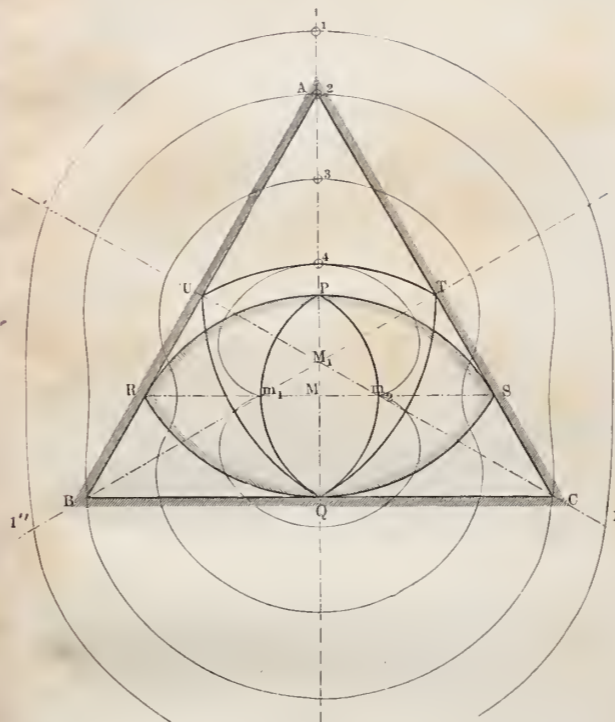


Fig. 6.

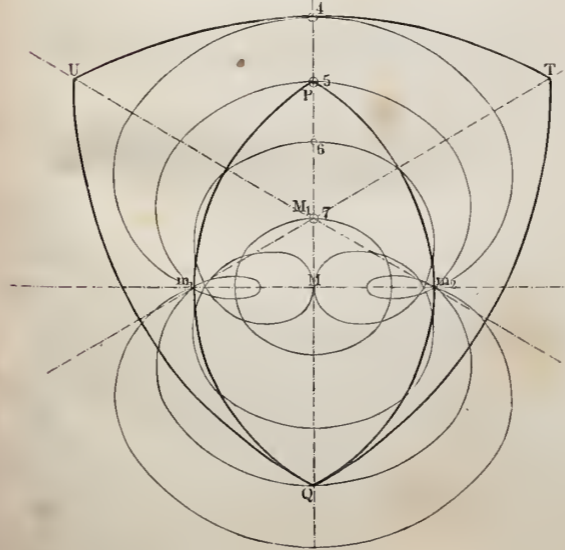


Fig. 7.

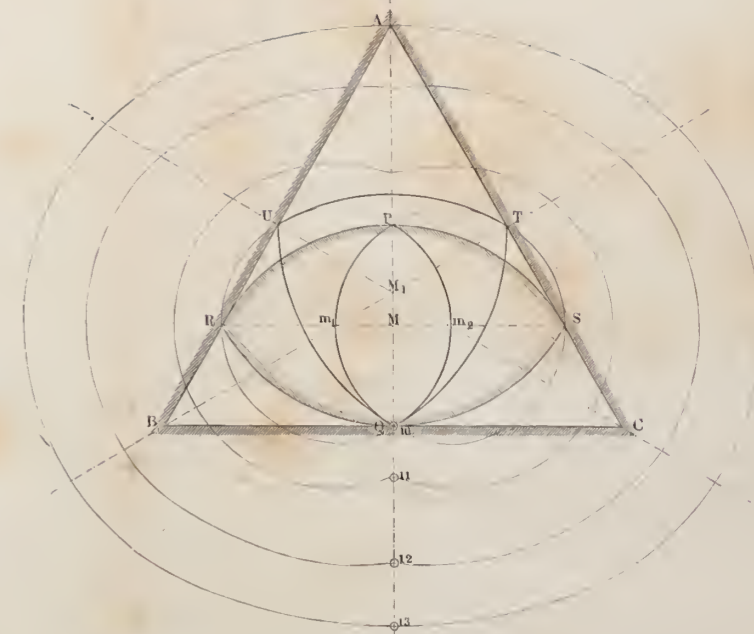
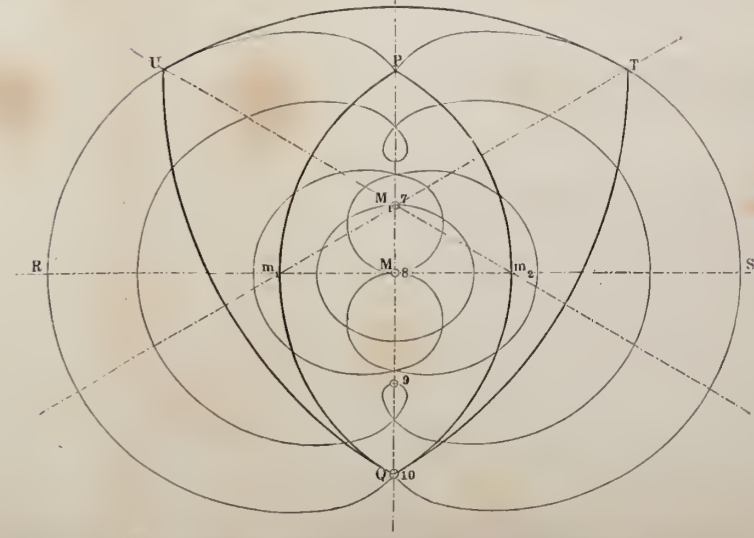


Fig. 8.



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Fig. 1.

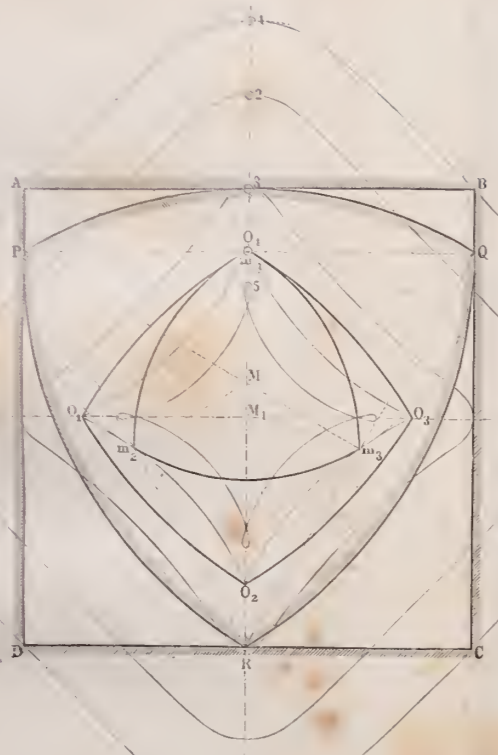


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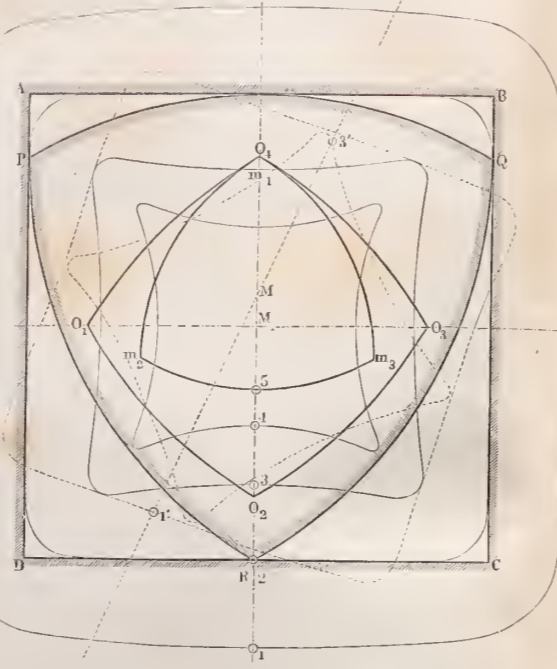


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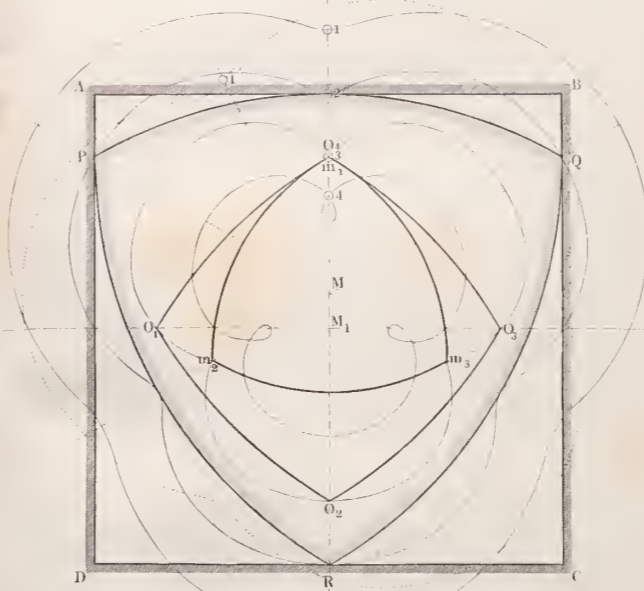


Fig. 7.

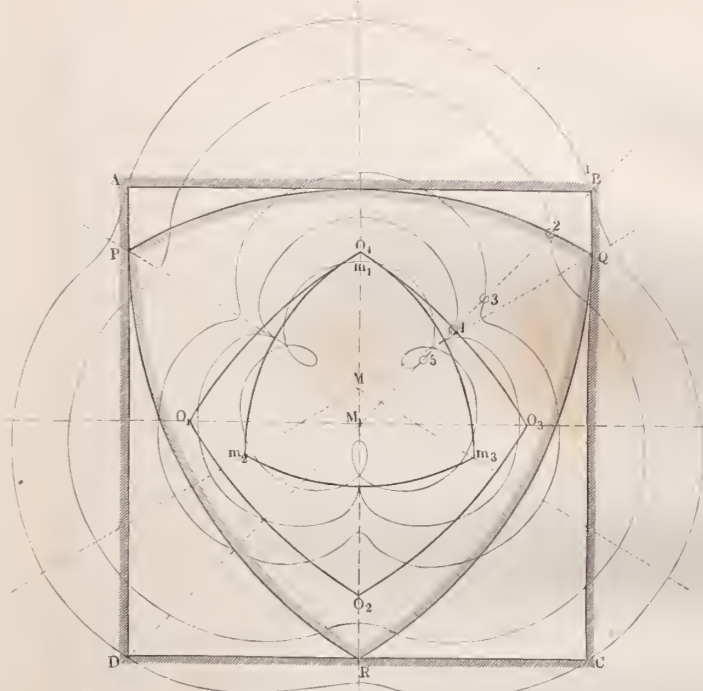


Fig. 2.

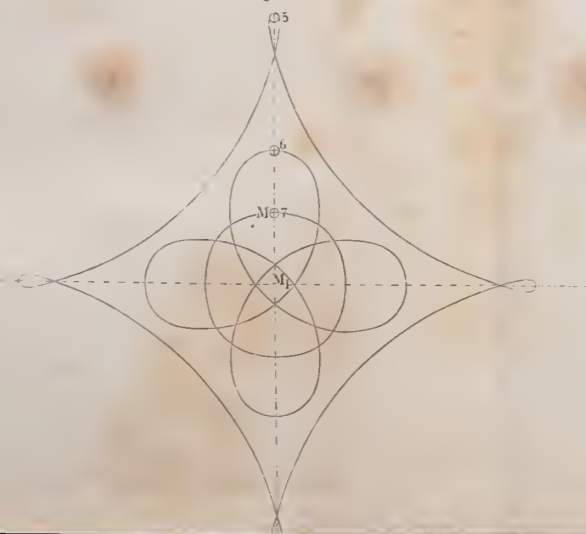


Fig. 4.

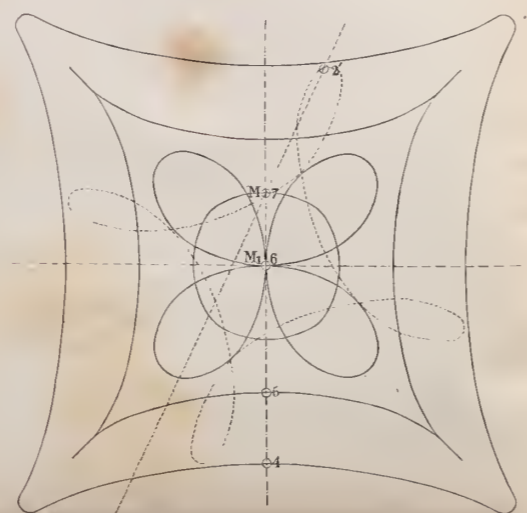


Fig. 6.

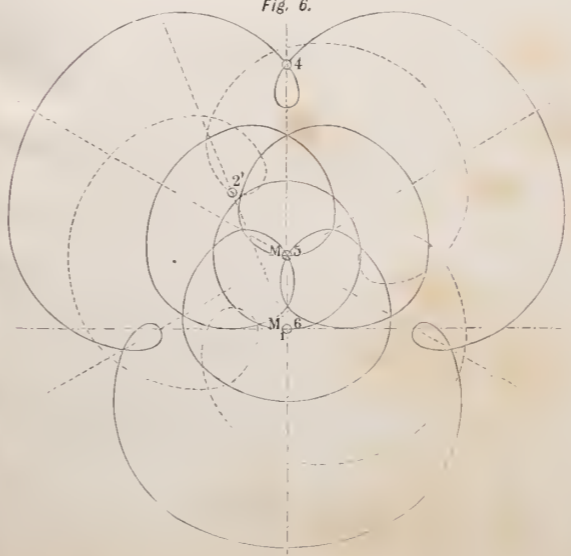


Fig. 8.

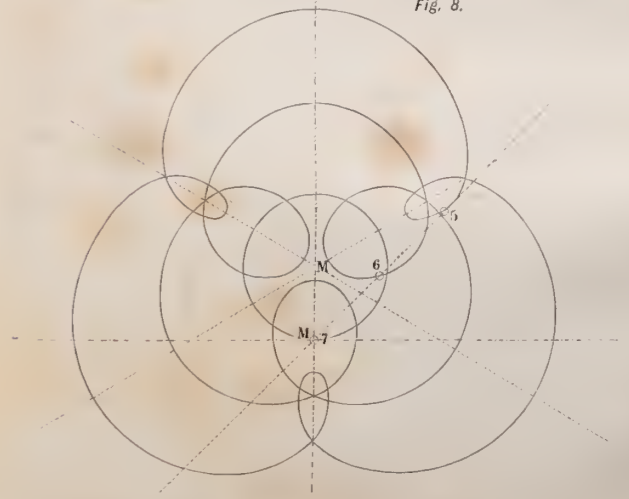


Fig. 1.

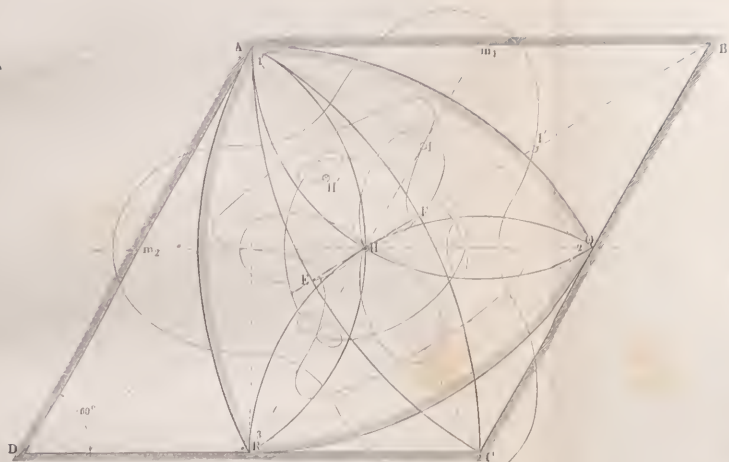


Fig. 2.

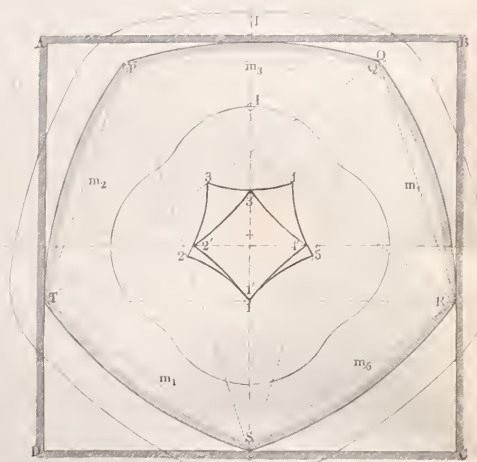


Fig. 3.

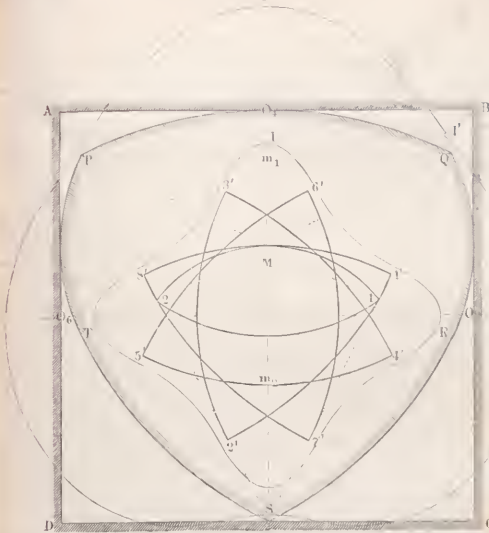


Fig. 4.

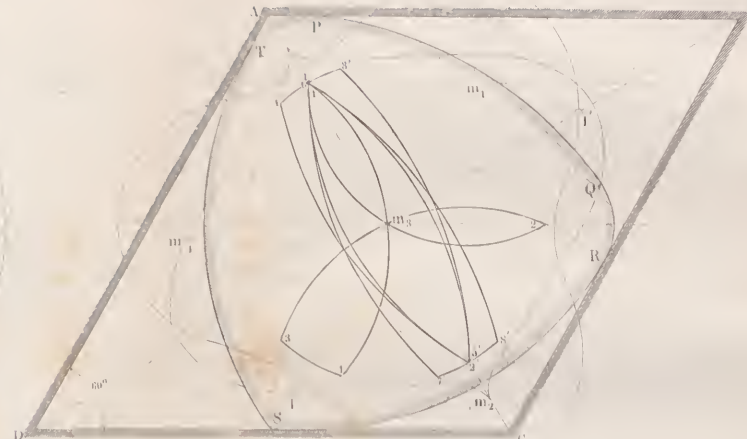


Fig. 5.

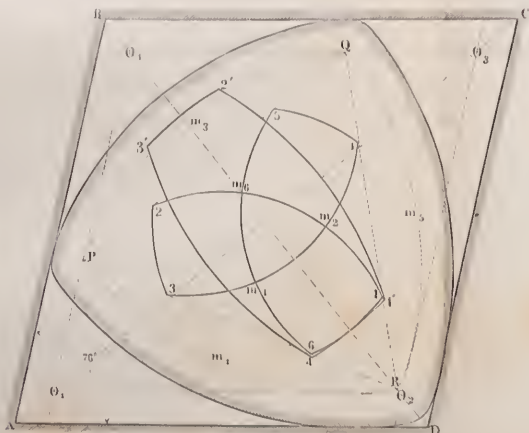


Fig. 6.

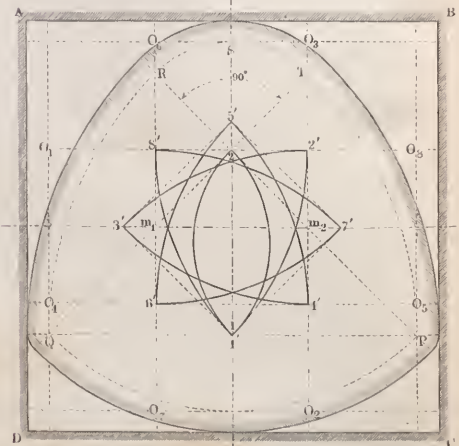


Fig. 7.

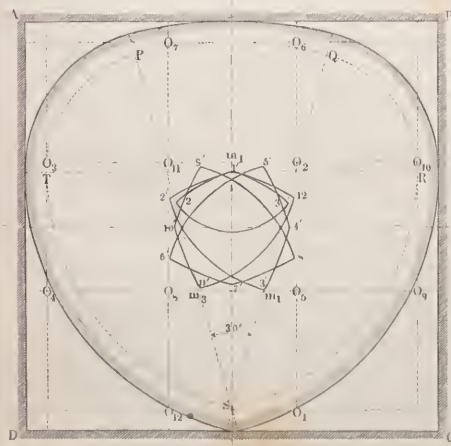
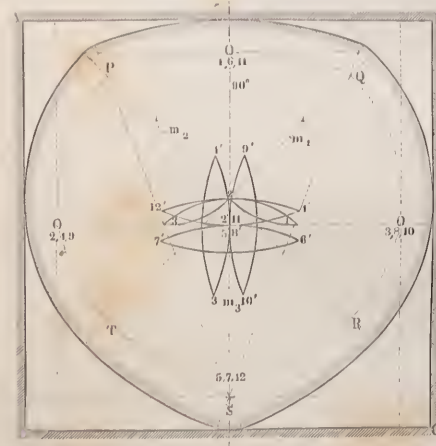
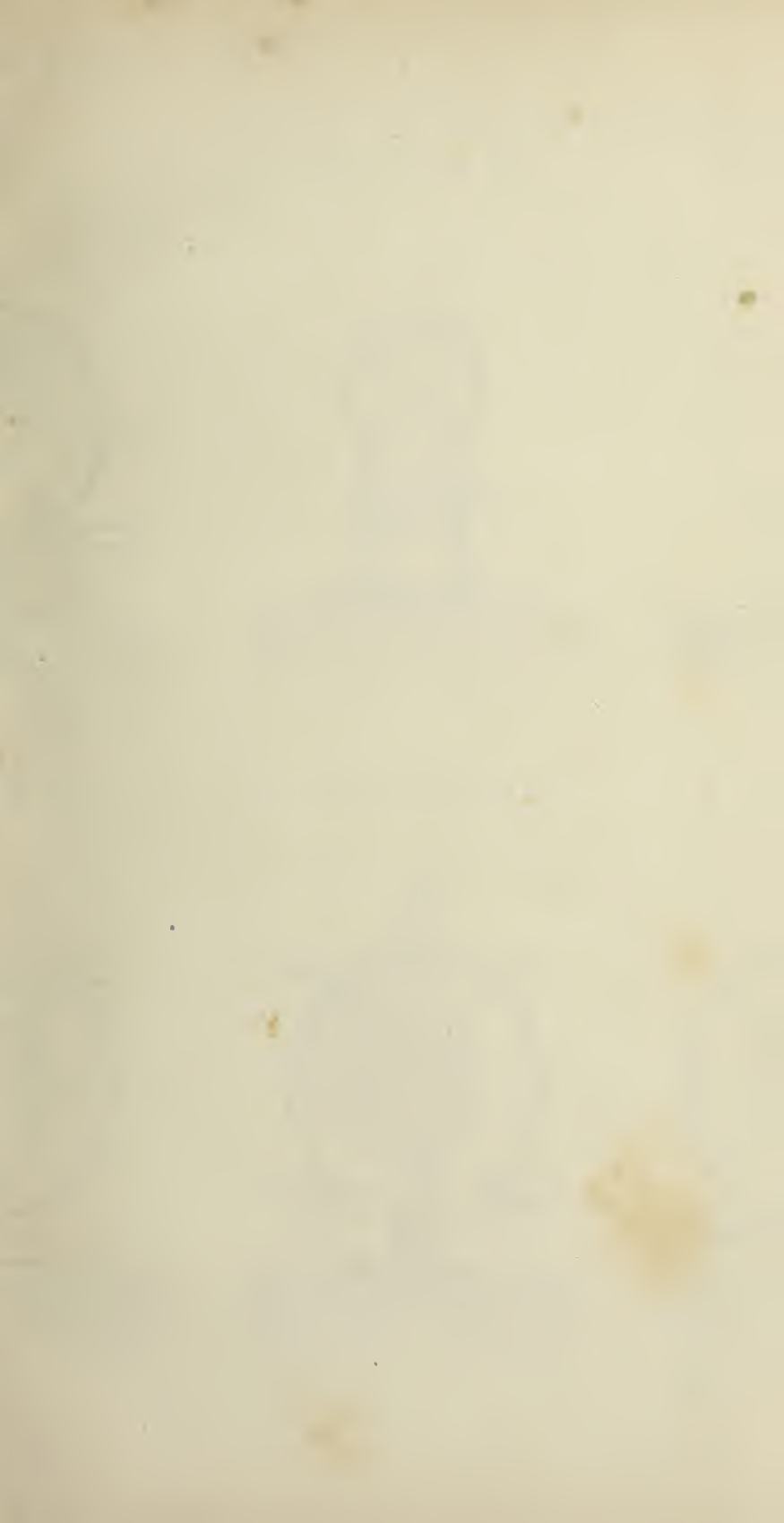


Fig. 8.

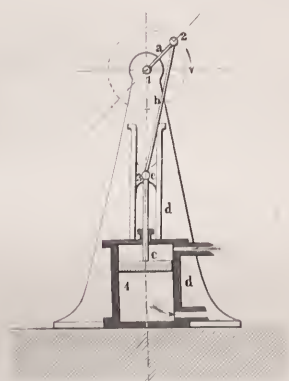




I. Rotirende Schubkurbel. $(C_3^I P^\perp)^d$

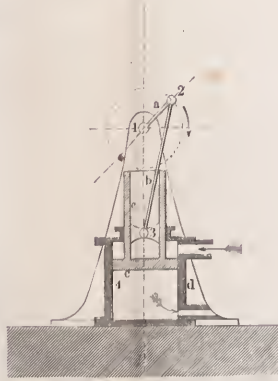
II. Oscillirende Kurbelschleife. $(C_3^{II} P^\perp)^b$

Fig. 1. Dpfm. Pumpe.



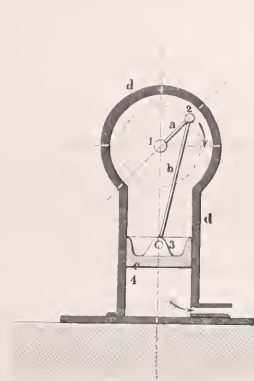
$(C_3^{II} P^\perp)^d; (V^\perp) = c, d.$

Fig. 2. Broderip. Humphry. Dpfm.



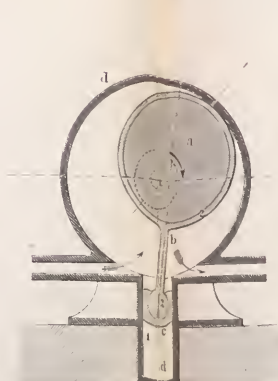
$(C_3^I P^\perp)^d; (V^\perp) = c, d.$

Fig. 3. Hastie. Hicks. Dpfm.



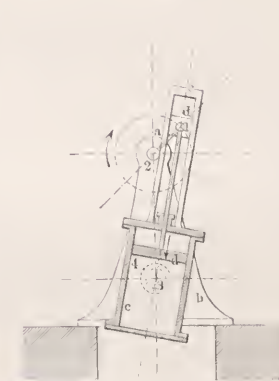
$(C_3^I P^\perp)^d; (V^\perp) = c, d.$

Fig. 4. Patton. Pumpe.



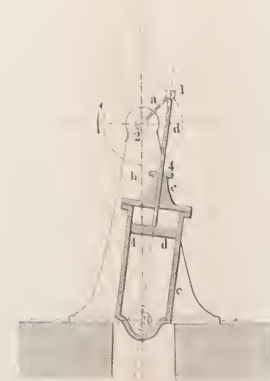
$(C_3^I P^\perp)^d; (V^\perp) = b, d.$

Fig. 9. Murdock. Dpfm.



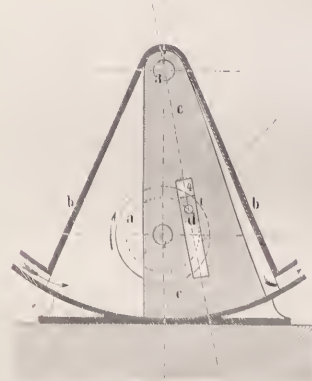
$(C_3^I P^\perp)^b; (V^\perp) = d, c.$

Fig. 10. Alban. Farcol. Dpfm.



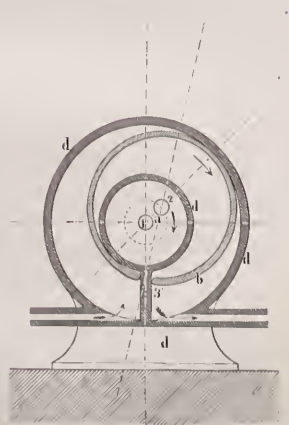
$(C_3^I P^\perp)^b; (V^\perp) = d, c.$

Fig. 11. Rx. Pumpe.



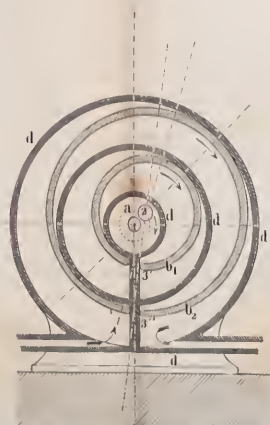
$(C_3^I P^\perp)^b; (V^\perp) = c, b.$

Fig. 5. Lamb. Dpfm.



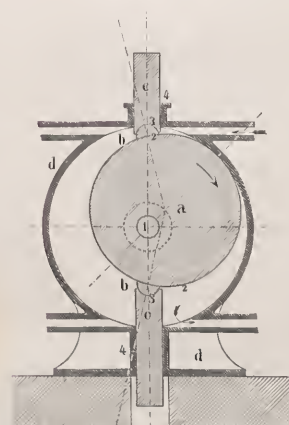
$(C_3^I P^\perp)^d - c; (V^\perp) = b, d.$

Fig. 6. Lamb. Dpfm.



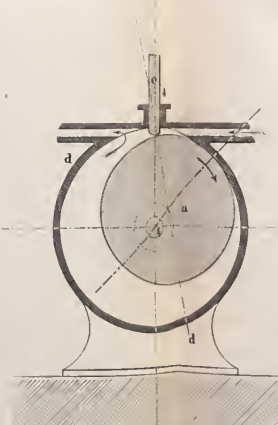
$2[(C_3^I P^\perp)^d - c]; (V^\perp) = b, d.$

Fig. 7. Bährens. Napier. Bompard. Dpfm.



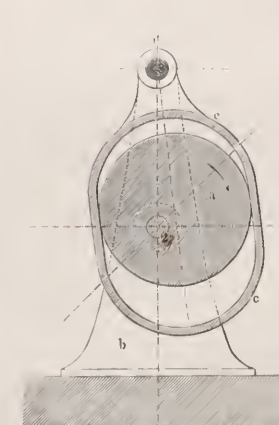
$2[(C_3^I P^\perp)^d - \frac{b}{2} - \frac{c}{2}]; (V^\perp) = a, d.$

Fig. 8. Yale. Hall. Dpfm.



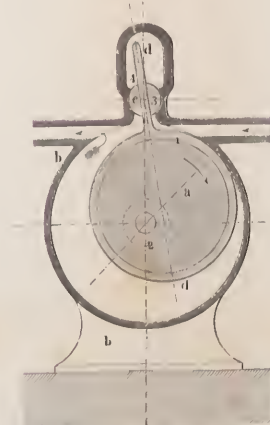
$(C_3^I P^\perp)^d - b - \frac{c}{2}; (V^\perp) = a, d.$

Fig. 12. Simpson & Shipton. Dpfm.



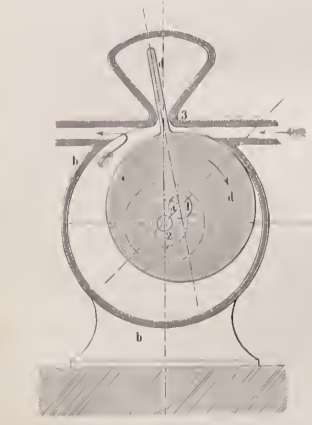
$(C_3^I P^\perp)^b - d; (V^\perp) = a, c.$

Fig. 13. Knott. Pumpe.



$(C_3^I P^\perp)^b; (V^\perp) = d, b.$

Fig. 14. Wedding. Gebläse.



$(C_3^I P^\perp)^b - c; (V^\perp) = d, b.$

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III. Rotirende Kurbelschleife. $(C_3^m P^\perp)^a$

Fig. 1. Ward, Schneider, Mouline, Dpfm.

Fig. 2. Morey, Schneider, Dpfm.

Fig. 3. Emery, Pumpe.

Fig. 4. Cochrane, Dpfm.

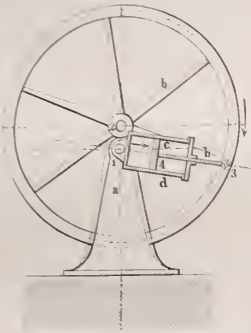
Fig. 5. Beale, Gaspumpe.

Fig. 6. Davies, Dpfm.

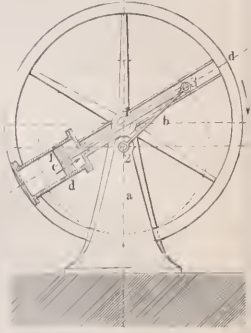
Fig. 7. Ramelli, Pumpe.

Fig. 8. Jones, Ortleb, Dpfm, Pumpe.

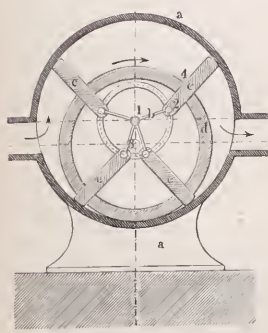
Fig. 9. Beale, Dalgely, Dpfm.



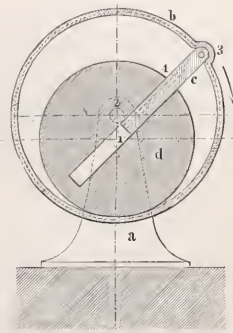
$(C_3^m P^\perp)^a; (V^\pm) = c, d.$



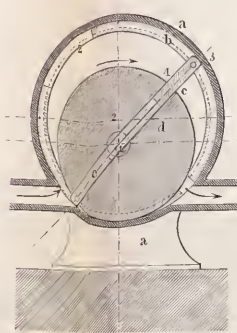
$(C_3^m P^\perp)^a; (V^\pm) = c, d.$



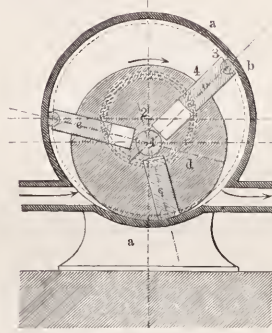
$4 (C_3^m P^\perp)^a; (V^\pm) = c, a.$



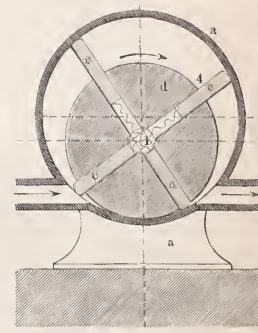
$(C_3^m P^\perp)^a; (V^\pm) = c, b.$



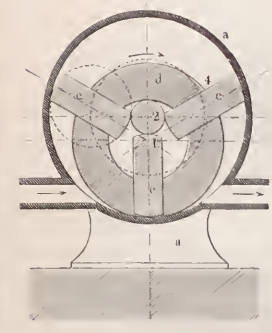
$2 (C_3^m P^\perp)^a; (V^\pm) = c, a.$



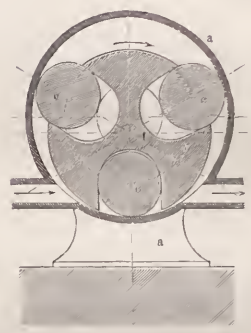
$3 (C_3^m P^\perp)^a; (V^\pm) = c, a.$



$4 [(C_3^m P^\perp)^a - b - \frac{c}{2}]; (V^\pm) = c, a.$



$3 [(C_3^m P^\perp)^a - b]; (V^\pm) = c, a.$



$3 [(C_3^m P^\perp)^a - b]; (V^\pm) = c, a.$

Fig. 10. Smyth, Dpfm.

Fig. 11. Cochrane, Hick, Lechal, Dpfm.

Fig. 12. Bellford, Gebläse.

Fig. 13. Cochrane, Dpfm.

Fig. 14. Cochrane, Dpfm.

Fig. 15. Rx.

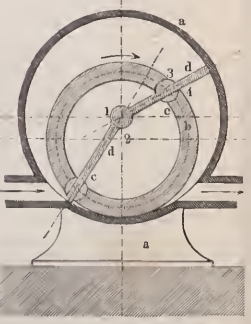
Fig. 16. Minari, Stocker, Dpfm, Pumpe.

Fig. 17. Cochrane, Dpfm.

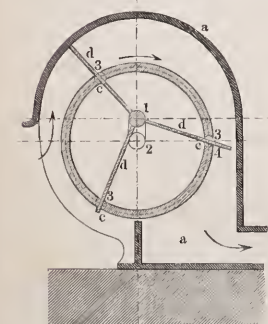
Fig. 18. Fletcher, Dpfm.



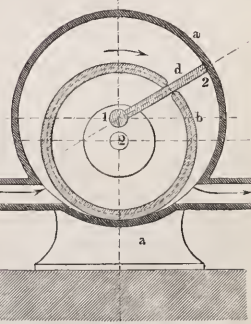
$4 [(C_3^m P^\perp)^a - b]; (V^\pm) = c, a.$



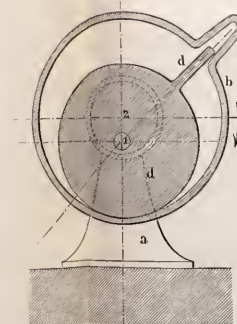
$2 (C_3^m P^\perp)^a; (V^\pm) = d, a.$



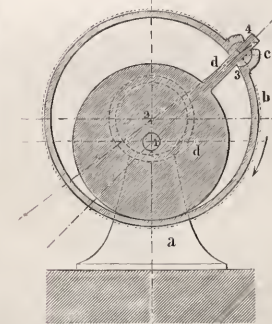
$3 (C_3^m P^\perp)^a; (V^\pm) = d, a.$



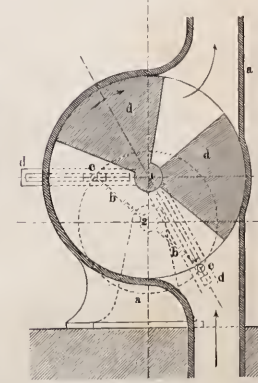
$(C_3^m P^\perp)^a - c; (V^\pm) = d, a.$



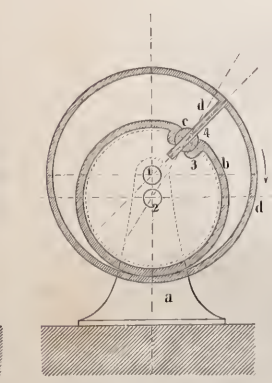
$(C_3^m P^\perp)^a - c; (V^\pm) = d, b.$



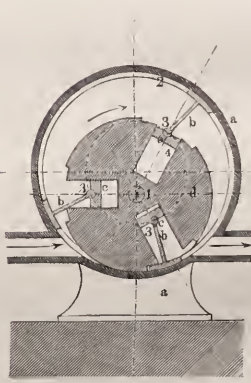
$(C_3^m P^\perp)^a; (V^\pm) = d, b.$



$2 (C_3^m P^\perp)^a; (V^\pm) = d, a.$



$(C_3^m P^\perp)^a; (V^\pm) = b, d.$

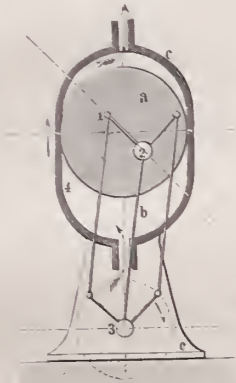


$3 (C_3^m P^\perp)^a; (V^\pm) = b, a.$

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IV. Oscillirende Schubkurbel. $(C_3^a P_{\frac{1}{2}})^c$

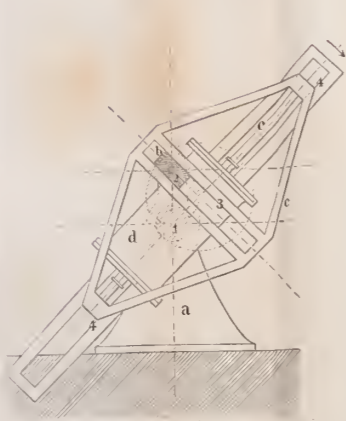
Fig. 1. Simpson & Shipton. Dpfm.



$(C_3^a P_{\frac{1}{2}})^c - d + (C_4^a); (V^{\pm}) = a, c.$

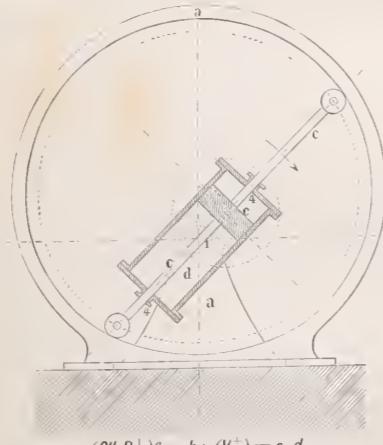
VI. Rotirende Kreuzschleife. $(C_2^a P_{\frac{1}{2}})^a$

Fig. 3. Witty. Dpfm.



$(C_2^a P_{\frac{1}{2}})^a; (V^{\pm}) = c, d.$

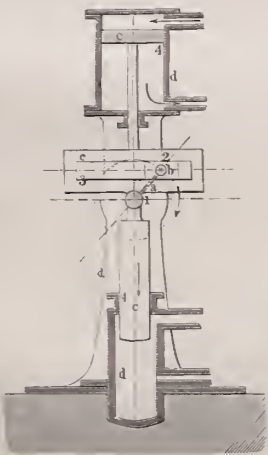
Fig. 4. Witty. Andrew. Dpfm.



$(C_2^a P_{\frac{1}{2}})^a - b; (V^{\pm}) = c, d.$

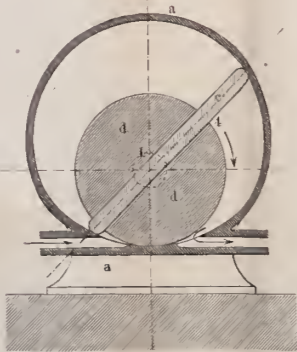
V. Rotirende Kreuzschleifenkurbel. $(C_2^a P_{\frac{1}{2}})^d$

Fig. 2. Dampfm.



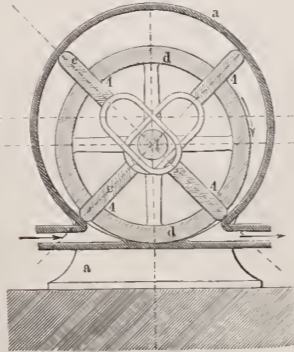
$(C_2^a P_{\frac{1}{2}})^d; (V^{\pm}) = c, d.$

Fig. 5. Franchot, Serkis-Ballian. Dpfm.



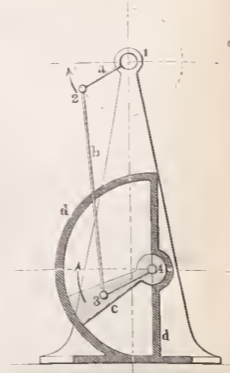
$(C_2^a P_{\frac{1}{2}})^a - b; (V^{\pm}) = c, a.$

Fig. 6. Woodcock. Dpfm.



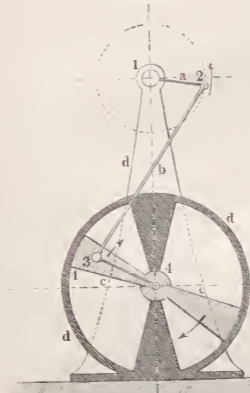
$2 [(C_2^a P_{\frac{1}{2}})^a - b]; (V^{\pm}) = c, a.$

Fig. 7. Branah, Morgan, Ericson. Dpfm.



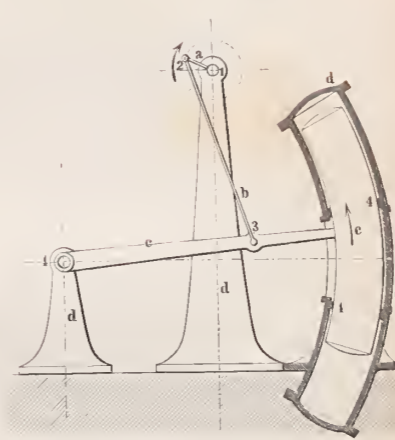
$(C_4^a)^d; (V^{\pm}) = c, d.$

Fig. 8. Thompson, Gray. Dpfm.



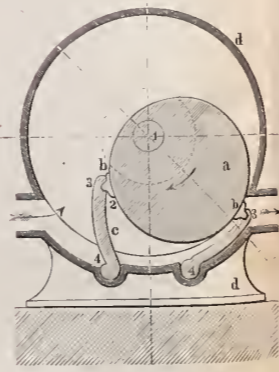
$(C_4^a)^d; (V^{\pm}) = c, d.$

Fig. 9. Degrand. Dpfm.



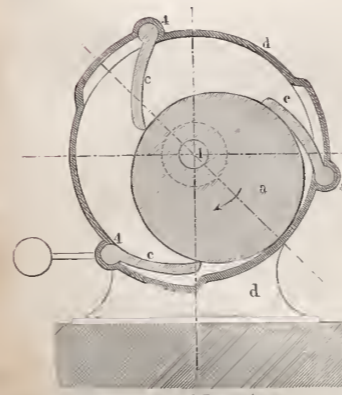
$(C_4^a)^d; (V^{\pm}) = c, d.$

Fig. 10. Dundonald. Dpfm.



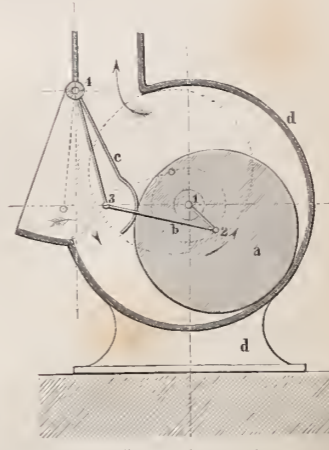
$2 [(C_4^a)^d - \frac{b}{2}]; (V^{\pm}) = a, d.$

Fig. 11. Cochrane. Dpfm.



$3 [(C_4^a)^d - b - \frac{c}{2}]; (V^{\pm}) = a, d.$

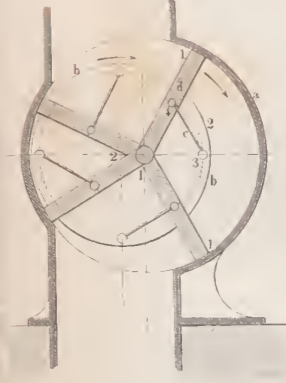
Fig. 12. Cooke. Gebläse.



$(C_4^a)^d; (V^{\pm}) = a, d.$

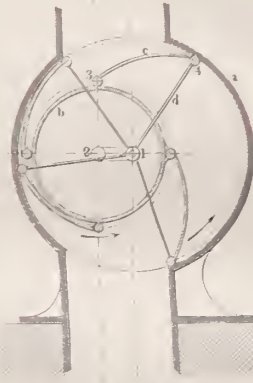
VIII. Rotirende Doppelkurbel. $(C_4^a)^a$

Fig. 13. Heppel. Pumpe.



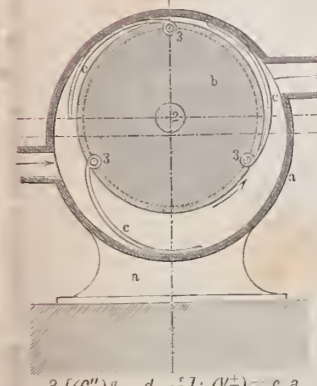
$4 (C_4^a)^a; (V^{\pm}) = d, a.$

Fig. 14. Lemielle. Gebläse.



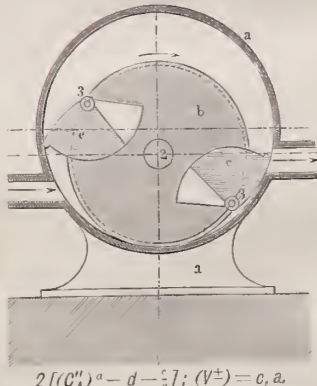
$4 (C_4^a)^a; (V^{\pm}) = c, a.$

Fig. 15. Ramelli. Pumpe.



$3 [(C_4^a)^a - d - \frac{c}{2}]; (V^{\pm}) = c, a.$

Fig. 16. Cochrane. Dpfm.



$2 [(C_4^a)^a - d - \frac{c}{2}]; (V^{\pm}) = c, a.$

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IX. Rotirende Kreuzgelenk-Kurbel. $(C^{\perp}_3 C^{\perp})^a$

X. Oscillirendes Kreuzgelenk. $(C^{\perp}_3 C^{\perp})^b$

Fig. 1. Davies. (Bishop.) Dpfm.

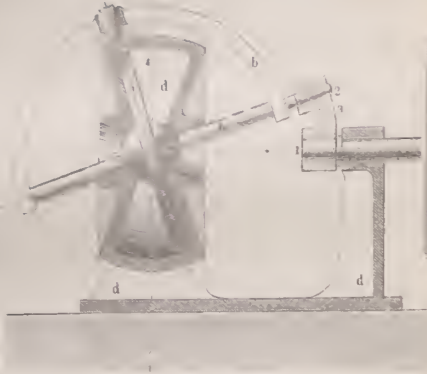
Fig. 2. Bouché, Molard. Dpfm.

Fig. 3. Davies. Pumpe.

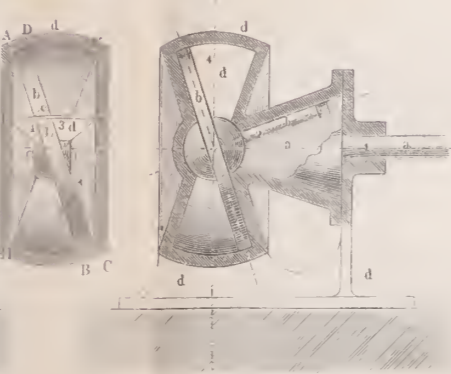
Fig. 4. Rx. Dpfm.

Fig. 5. Duncan, Dpfm.

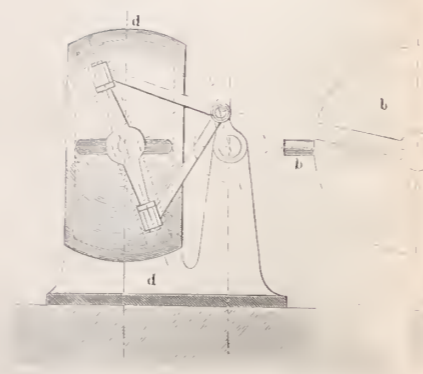
Fig. 6. Davies. Dpfm. Pumpe.



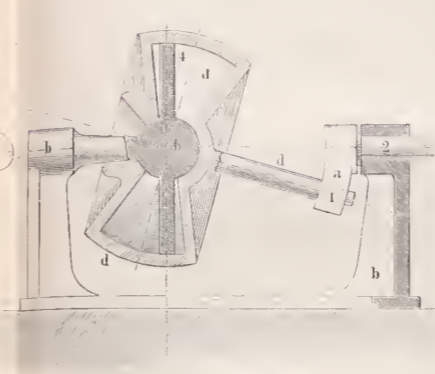
$(C^{\perp}_3 C^{\perp})^d (V^{\pm}) = b, d.$



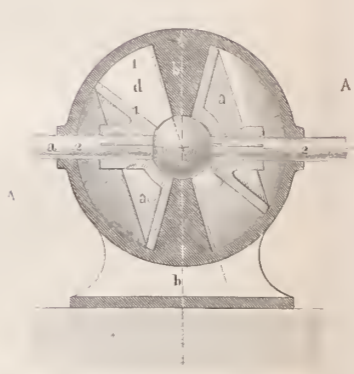
$(C^{\perp}_3 C^{\perp})^d (V^{\pm}) = b, d.$



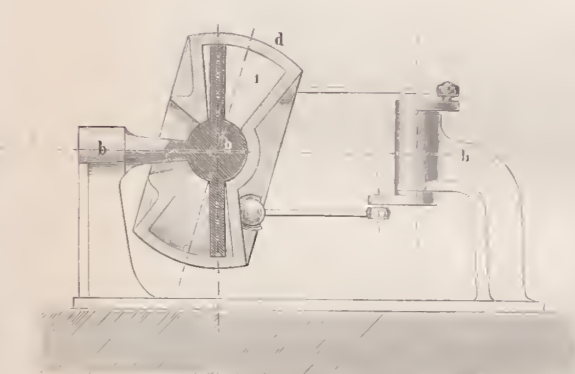
$(C^{\perp}_3 C^{\perp})^d - c - a + (C^{\perp}_3 G) (V^{\pm}) = b, d.$



$(C^{\perp}_3 C^{\perp})^b (V^{\pm}) = b, d.$



$(C^{\perp}_3 C^{\perp})^b (V^{\pm}) = a, b.$



$(C^{\perp}_3 C^{\perp})^b - a + (C G_1) (V^{\pm}) = b, d.$

XI. Rotirendes Kreuzgelenk. $(C^{\perp}_3 C^{\perp})^a$

Fig. 7. Taylor & Davies. Dpfm.

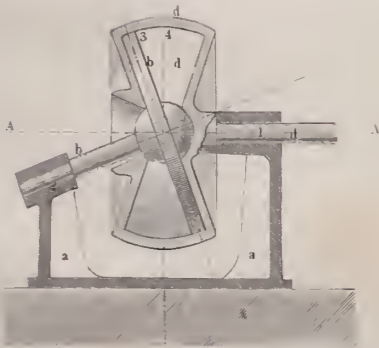
Fig. 8. Larivière & Braithwaite. Dpfm.

Fig. 9. Ducloux. Dpfm.

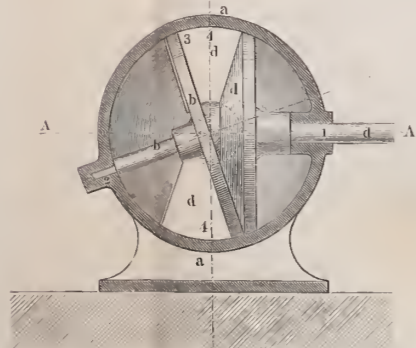
Fig. 10. Küster. Dpfm.

Fig. 11. Wood. Dpfm.

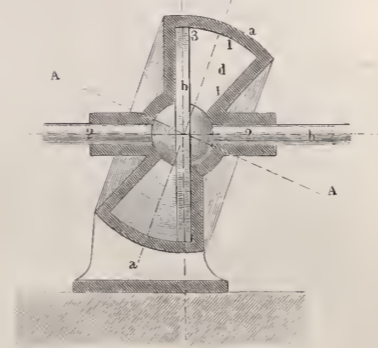
Fig. 12. Geiss. Dpfm.



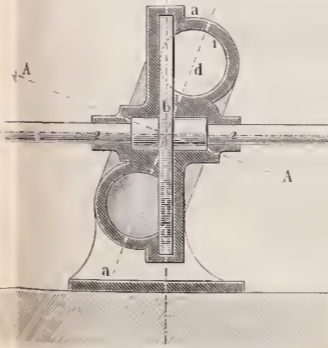
$(C^{\perp}_3 C^{\perp})^a (V^{\pm}) = b, d.$



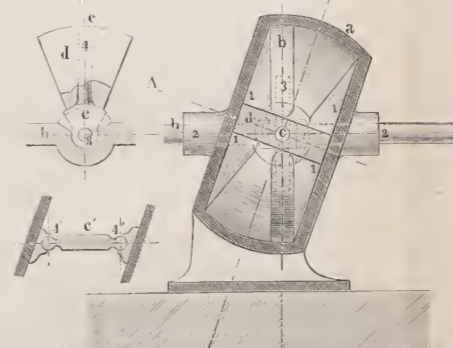
$(C^{\perp}_3 C^{\perp})^a (V^{\pm}) = d, a.$



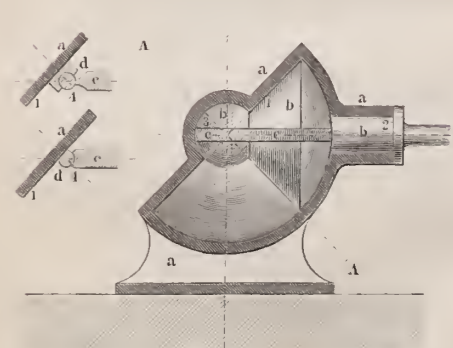
$(C^{\perp}_3 C^{\perp})^a (V^{\pm}) = d, a.$



$(C^{\perp}_3 C^{\perp})^a (V^{\pm}) = d, a.$



$(C^{\perp}_3 C^{\perp})^a (V^{\pm}) = d, a.$



$(C^{\perp}_3 C^{\perp})^a - d (V^{\pm}) = c, a.$

Pappenheim.

Fabry.

Jones, Roots.

Roots.

Payton.

Fig. 1.

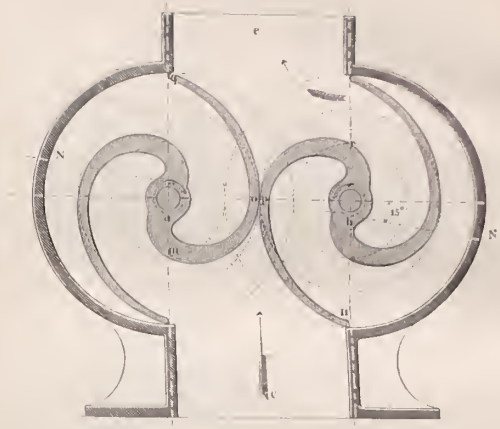
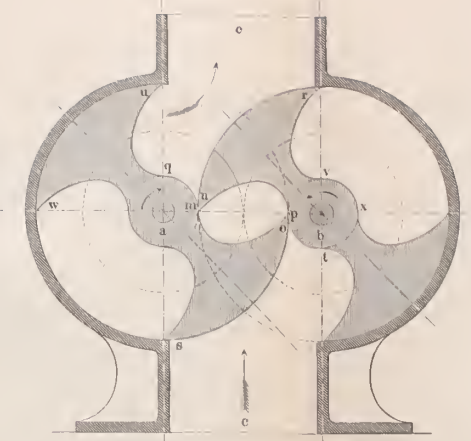
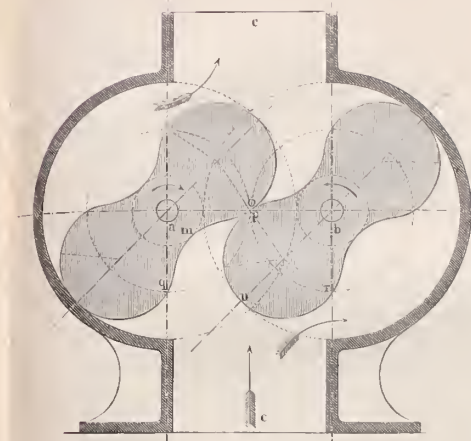
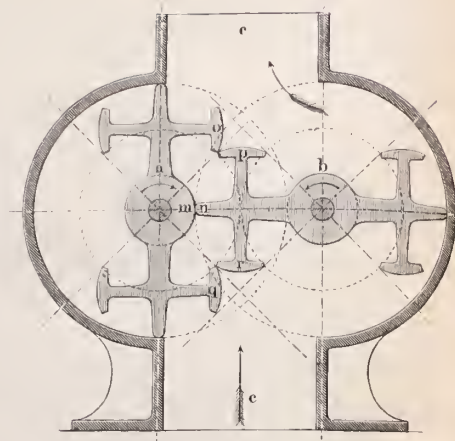
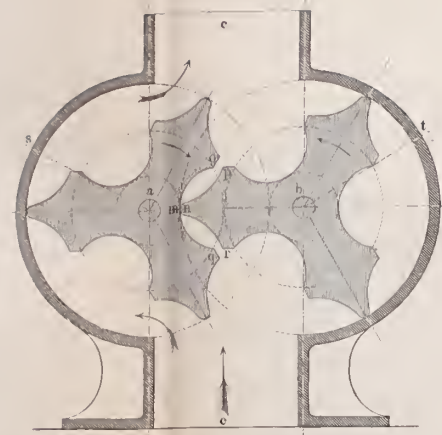
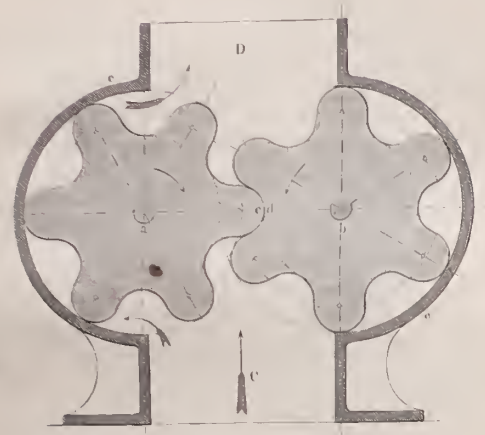
Fig. 3.

Fig. 4.

Fig. 5.

Fig. 6.

Fig. 7.



$(C_2 C_2'')^c; (V^\pm) = ab, c.$

$(C_2 C_2'')^c; (V^\pm) = ab, c.$

$(C_2 C_2'')^c; (V^\pm) = ab, c.$

$(C_2 C_2'')^c; (V^\pm) = ab, c.$

$(C_2 C_2'')^c; (V^\pm) = ab, c.$

$(C_2 C_2'')^c; (V^\pm) = ab, c.$

Fig. 2.

Evrard.

Lecocq, Repsold.

Dart.

Eve, Ganahl.

Révilion.

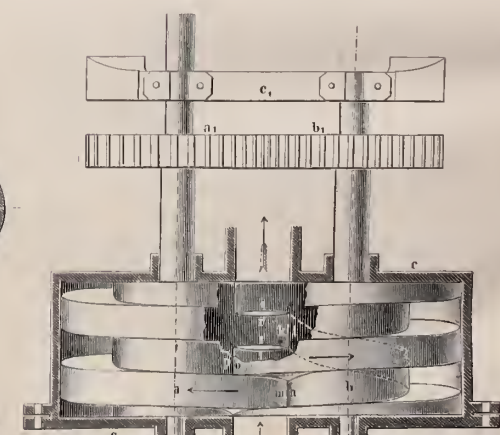
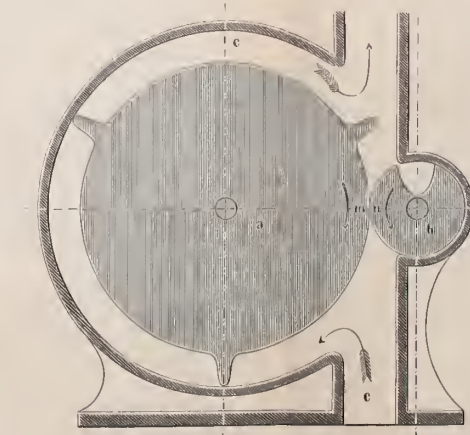
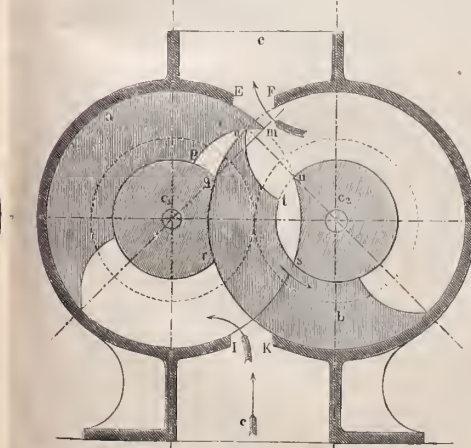
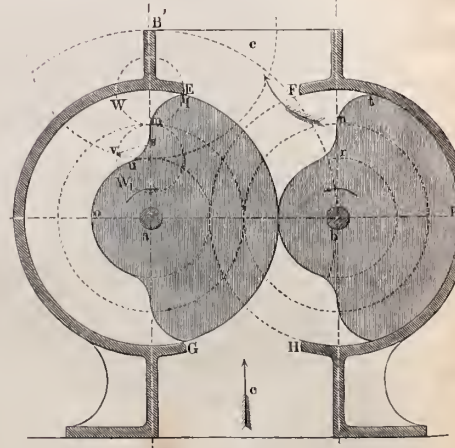
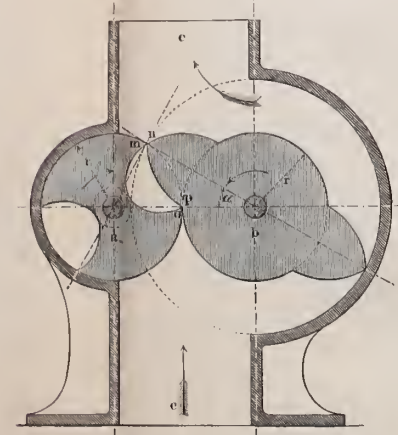
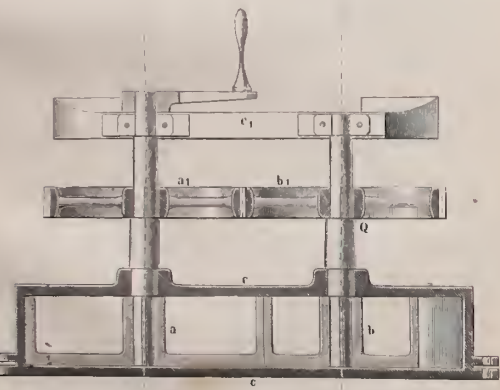
Fig. 8.

Fig. 9.

Fig. 10.

Fig. 11.

Fig. 12.



$(C_2 C_2'')^c; (V^\pm) = b, c.$

$(C_2 C_2'')^c; (V^\pm) = ab, c.$

$(C_2 C_2'')^c; (V^\pm) = ab, c.$

$(C_2 C_2'')^c; (V^\pm) = a, c.$

$(C_2 C_2'')^c; (V^\pm) = ab, c.$





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