Trommel-u. Zahnstangen-winden.

Fig. 1. 1/15. Alfred Lutmann, Altona.

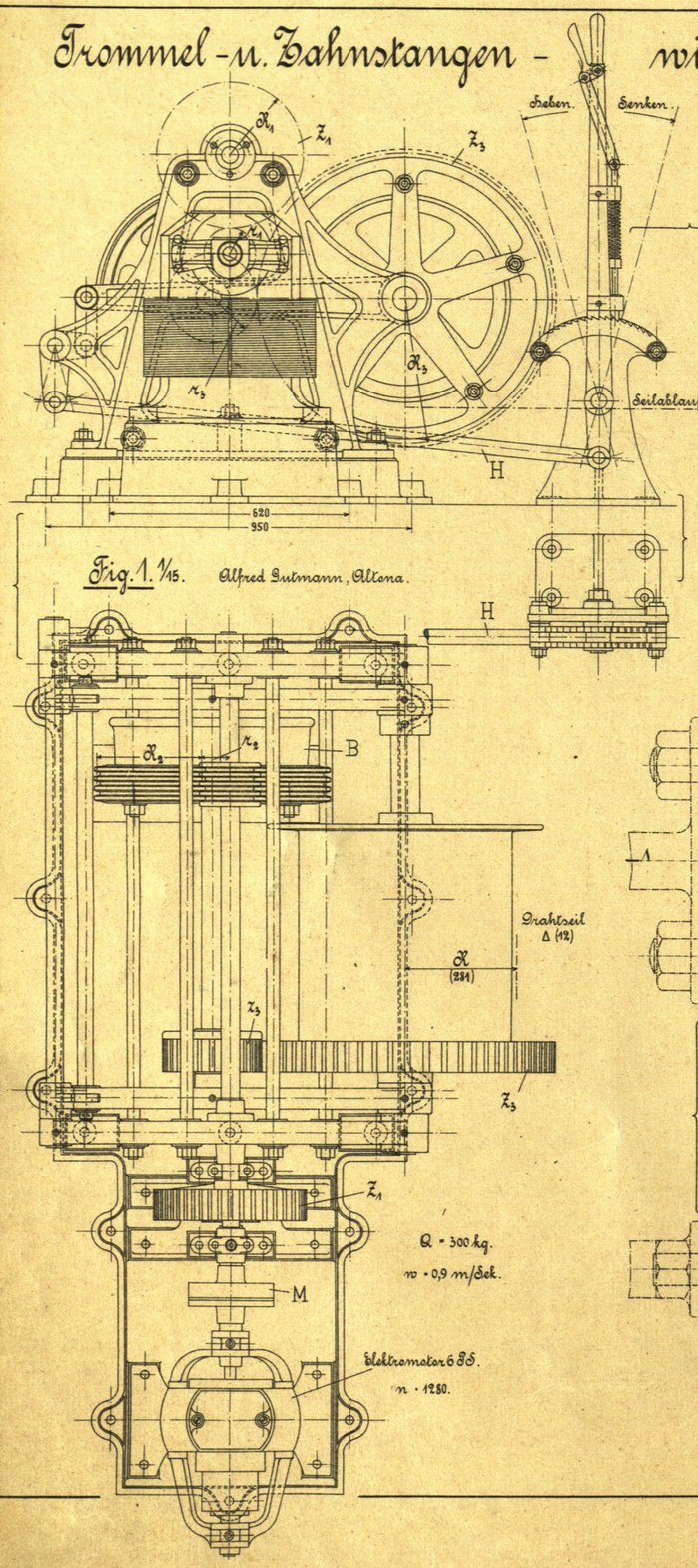


Fig. 2. 1/15. Alfred Lutmann, Altona. Q = 1000 kg. v = 0,35 m/Sek.

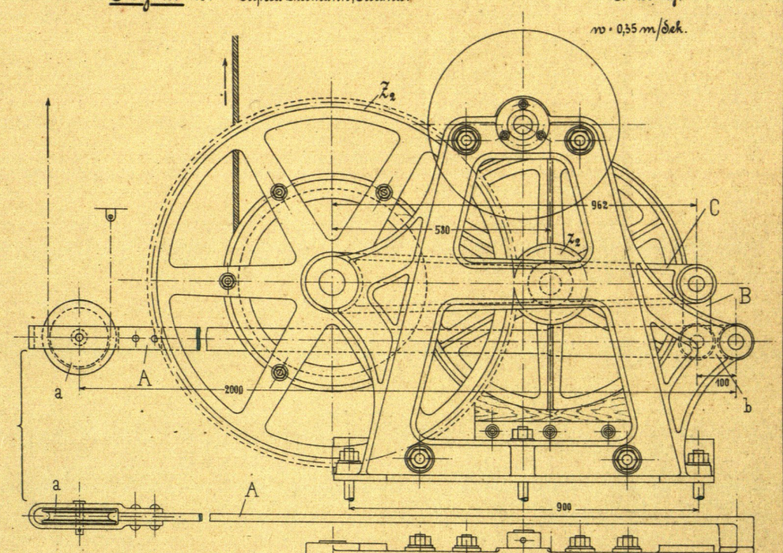
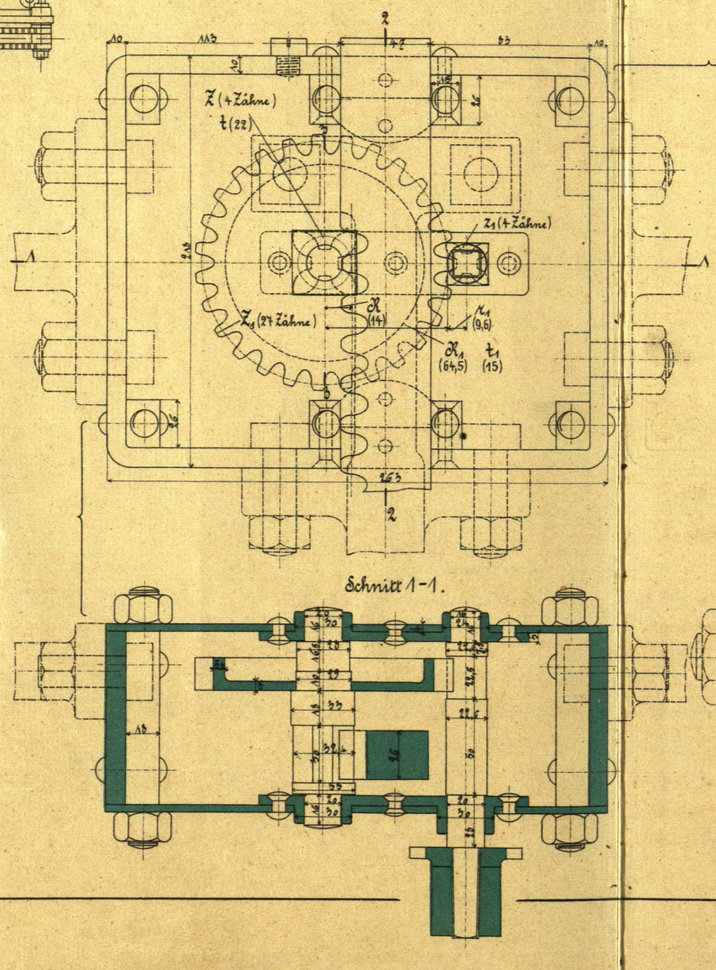
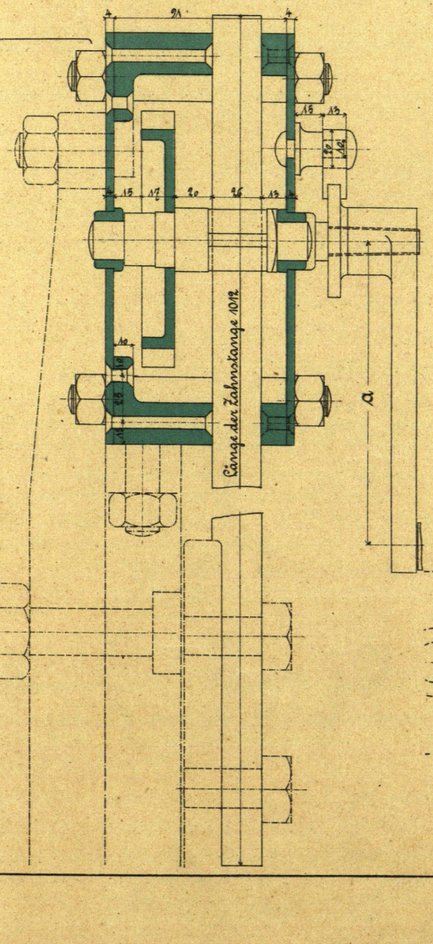


Fig. 3. 1/3. Elsässische Maschinenbau Ges. Grafenstaden.





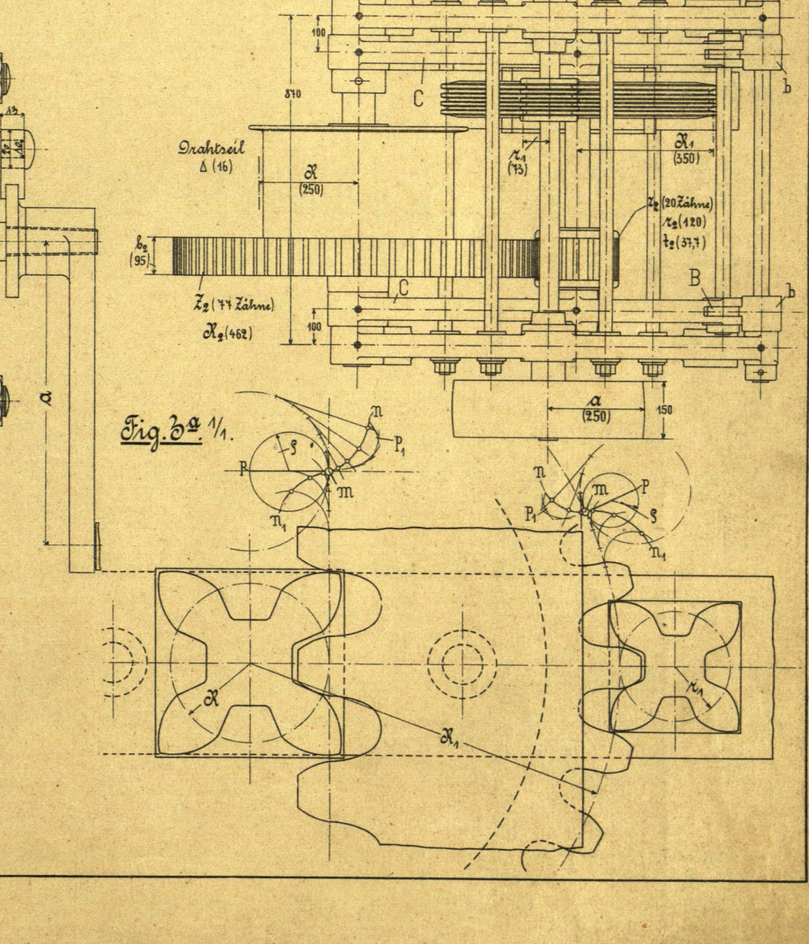


Fig. 3a. 1/1.