



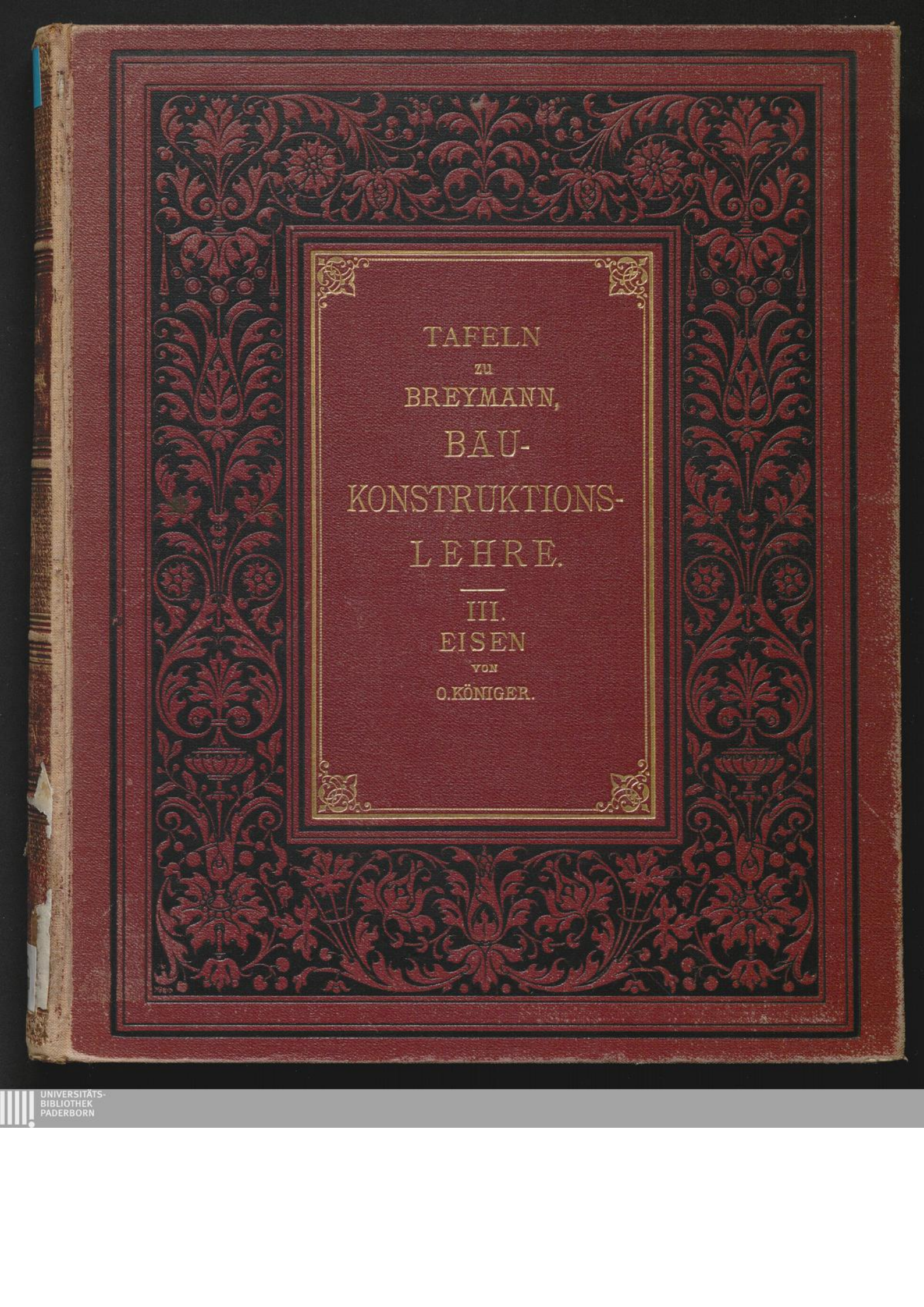
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Die Konstruktionen in Eisen

Königer, Otto

Leipzig, 1902

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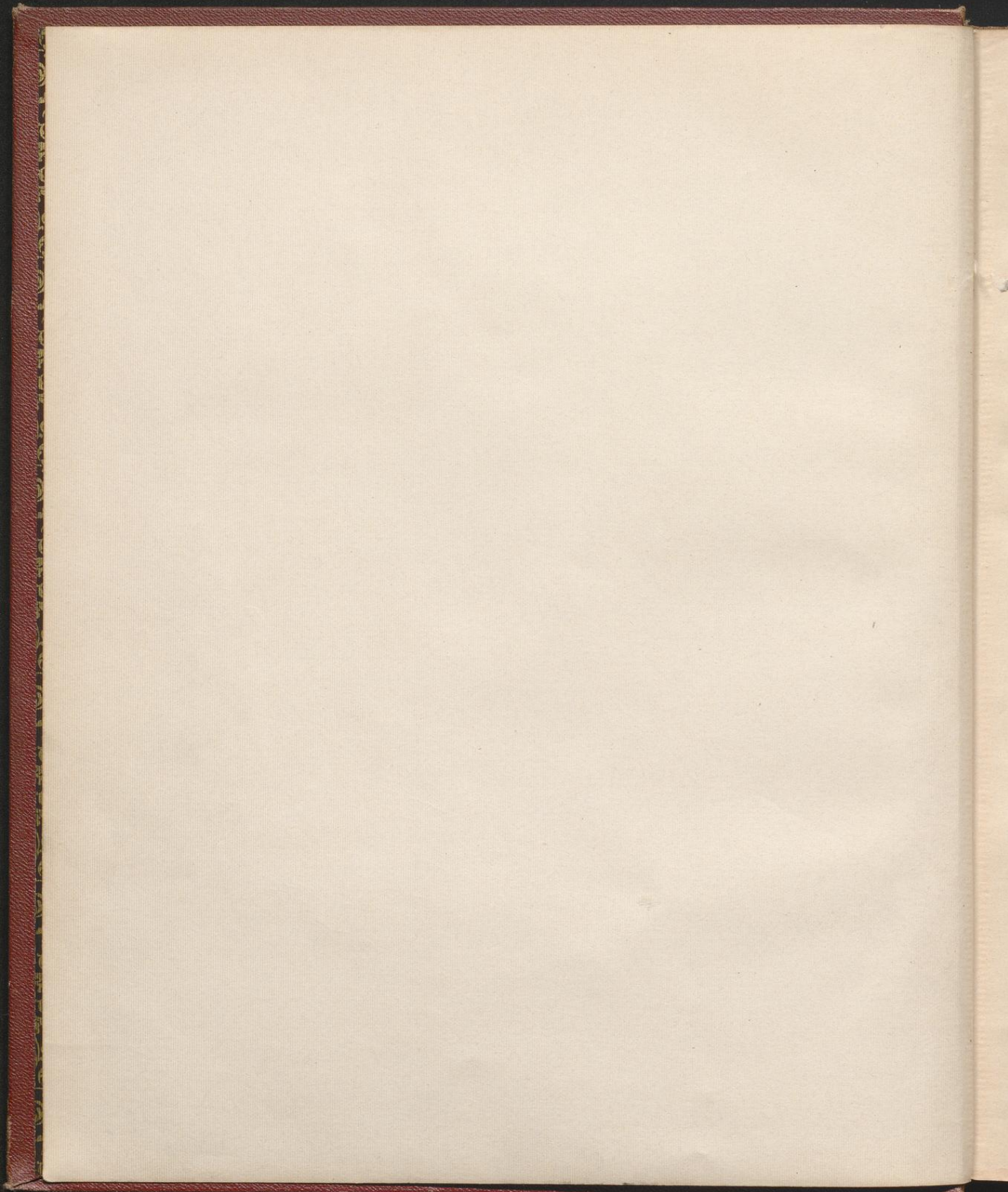


TAFELN
ZU
BREYMANN,
BAU-
KONSTRUKTIONS-
LEHRE.

III.
EISEN
VON
O. KÖNIGER.







E. N. 4895

66/11

Tafeln

34

Breymann, Baukonstruktionslehre.

Band III:

Die Konstruktionen in Eisen.

Sechste vermehrte und umgearbeitete Auflage

von

Otto Königer,

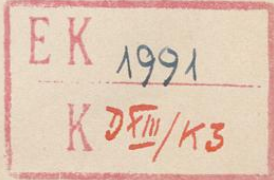
Königl. Preuß. Eisenbahn-Bau- und Betriebsinspektor a. D.,
Mitinhaber der Firma Knoch & Kallmeyer, Technisches Bureau für Hoch- und Tiefbau zu Halle a. S.



Leipzig,

J. M. Gebhardt's Verlag.

1902.





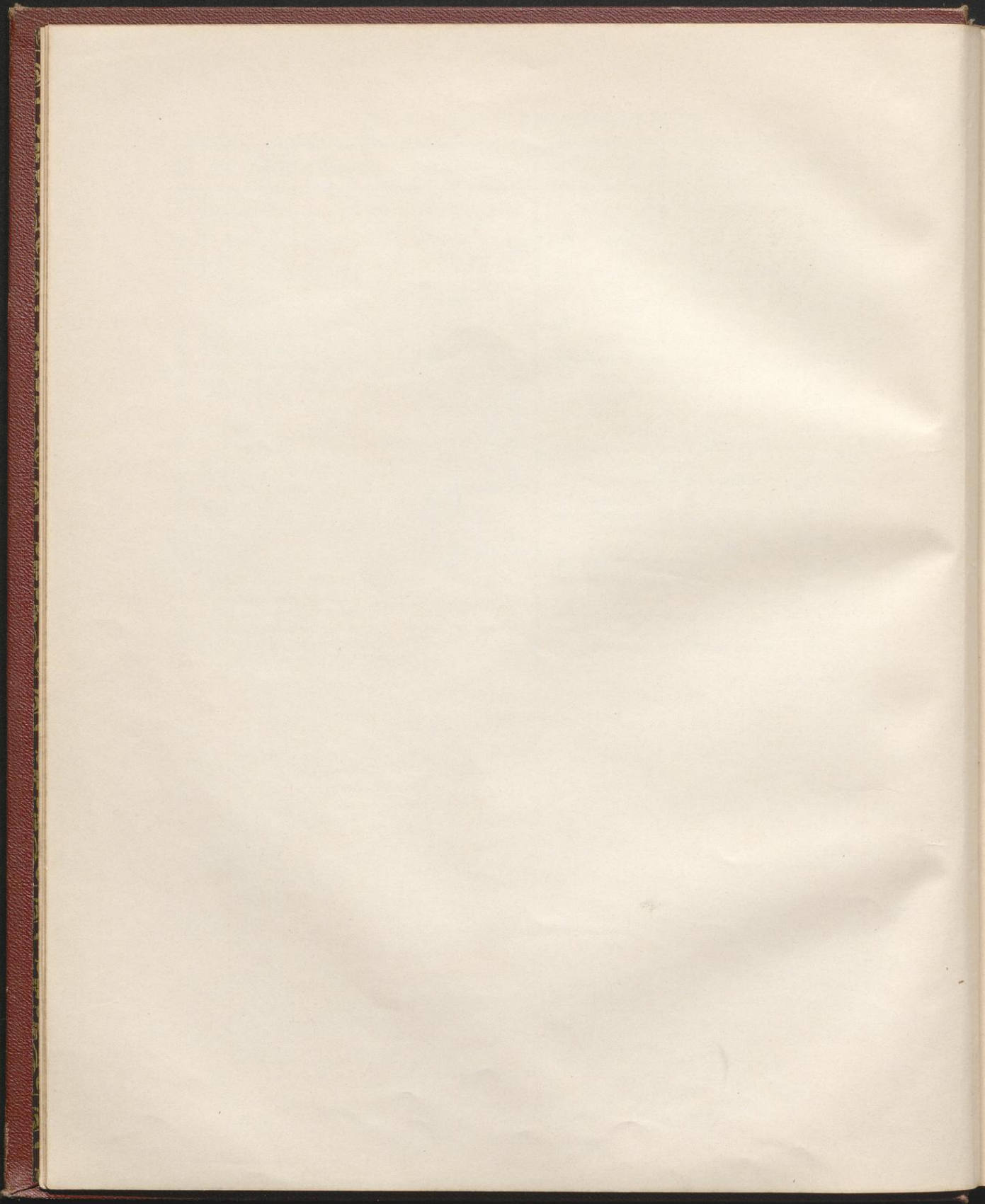
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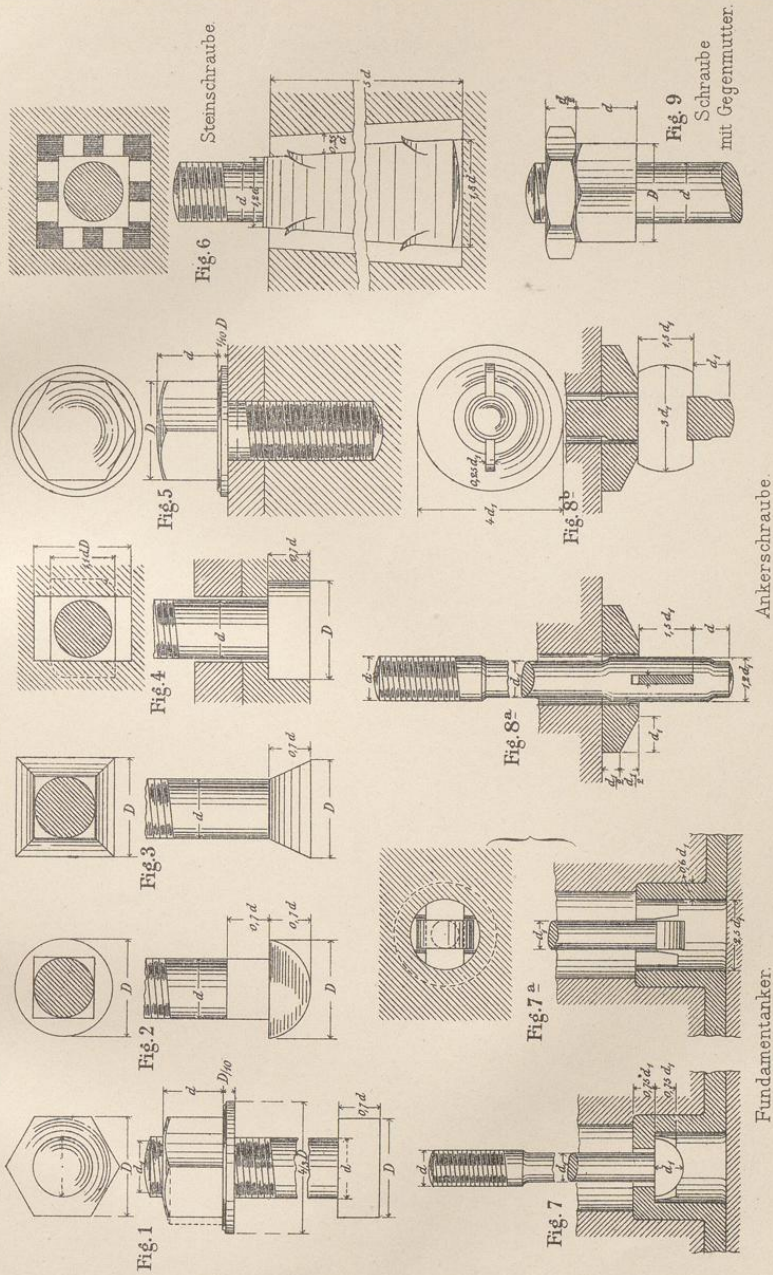
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Schraubenverbindungen.

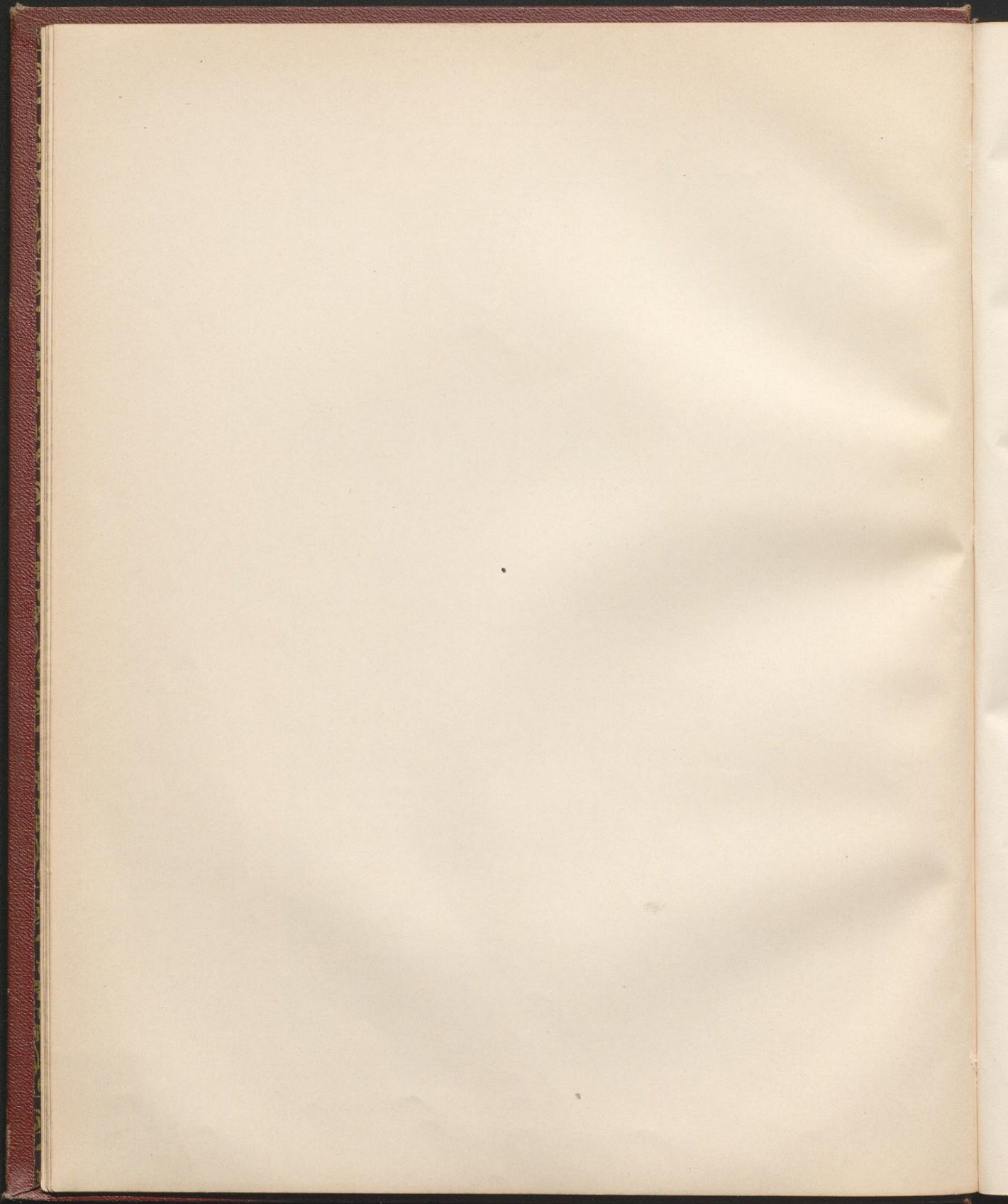


Steinschraube

Schraube mit Gegenmutter.

Ankerschraube

Fundamentanker



Schraubenverbindungen.

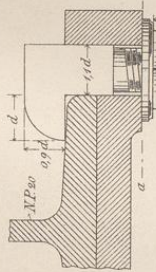


Fig. 1 Hakenschraube

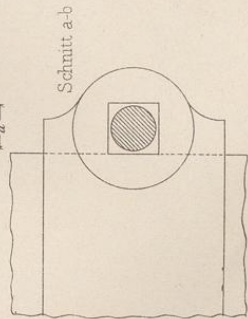


Fig. 2 Strebenschuh.

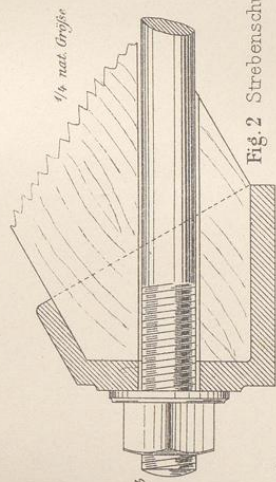


Fig. 3

Schnitt a-b

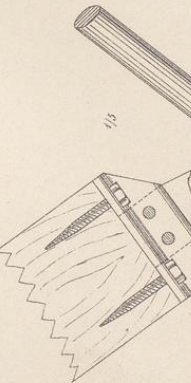


Fig. 4 Flansverschraubung

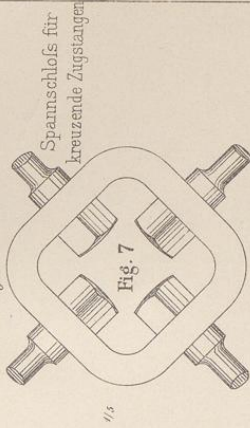


Fig. 5 Gelenkverbindung

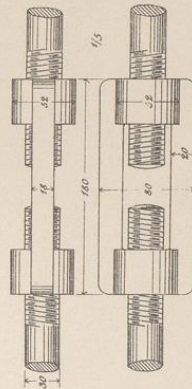


Fig. 6 Spanschloß für grade Zugstangen.

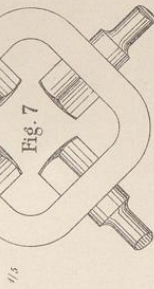
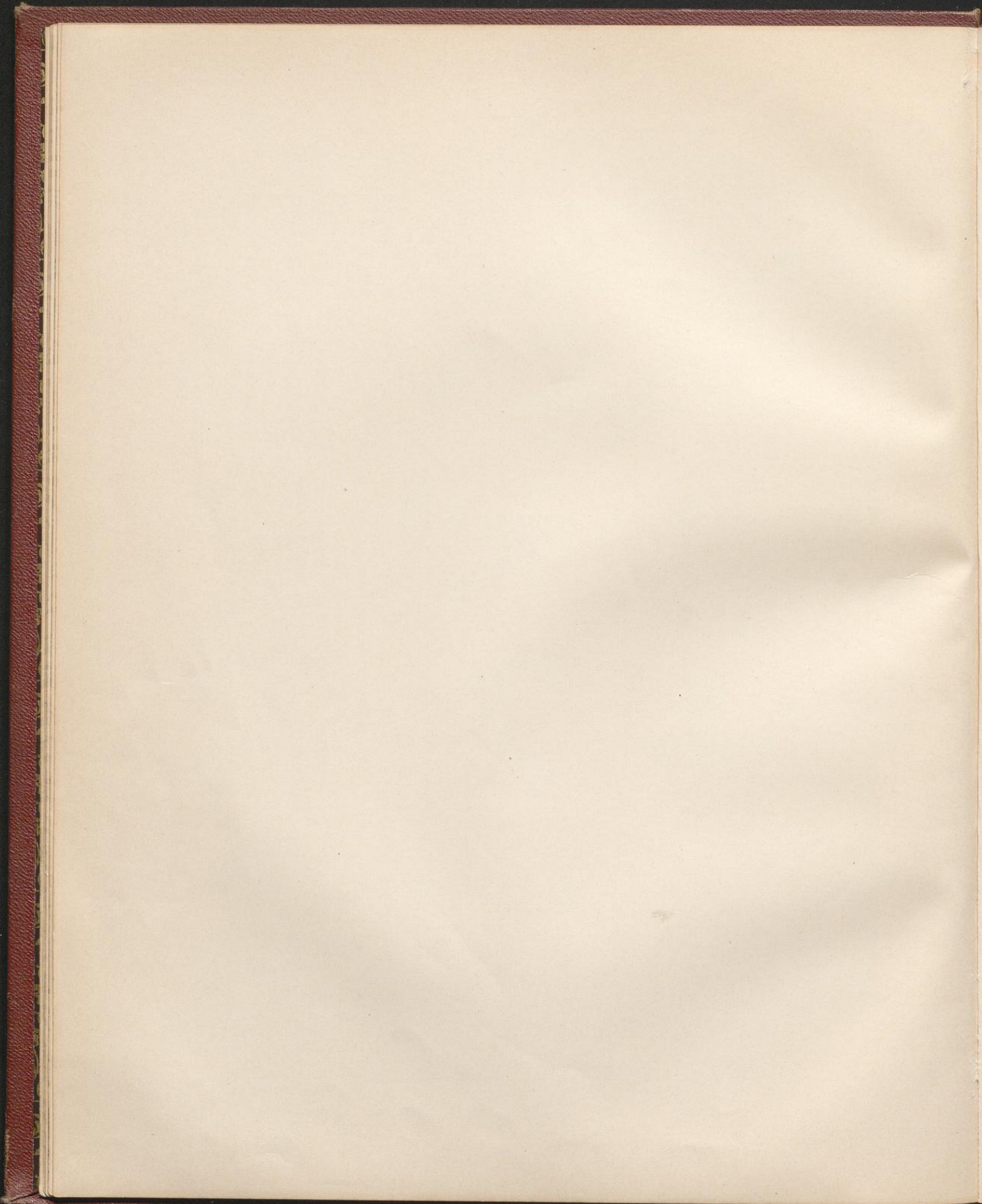


Fig. 7

Spanschloß für kreuzende Zugstangen



Gusseiserne Säulen.

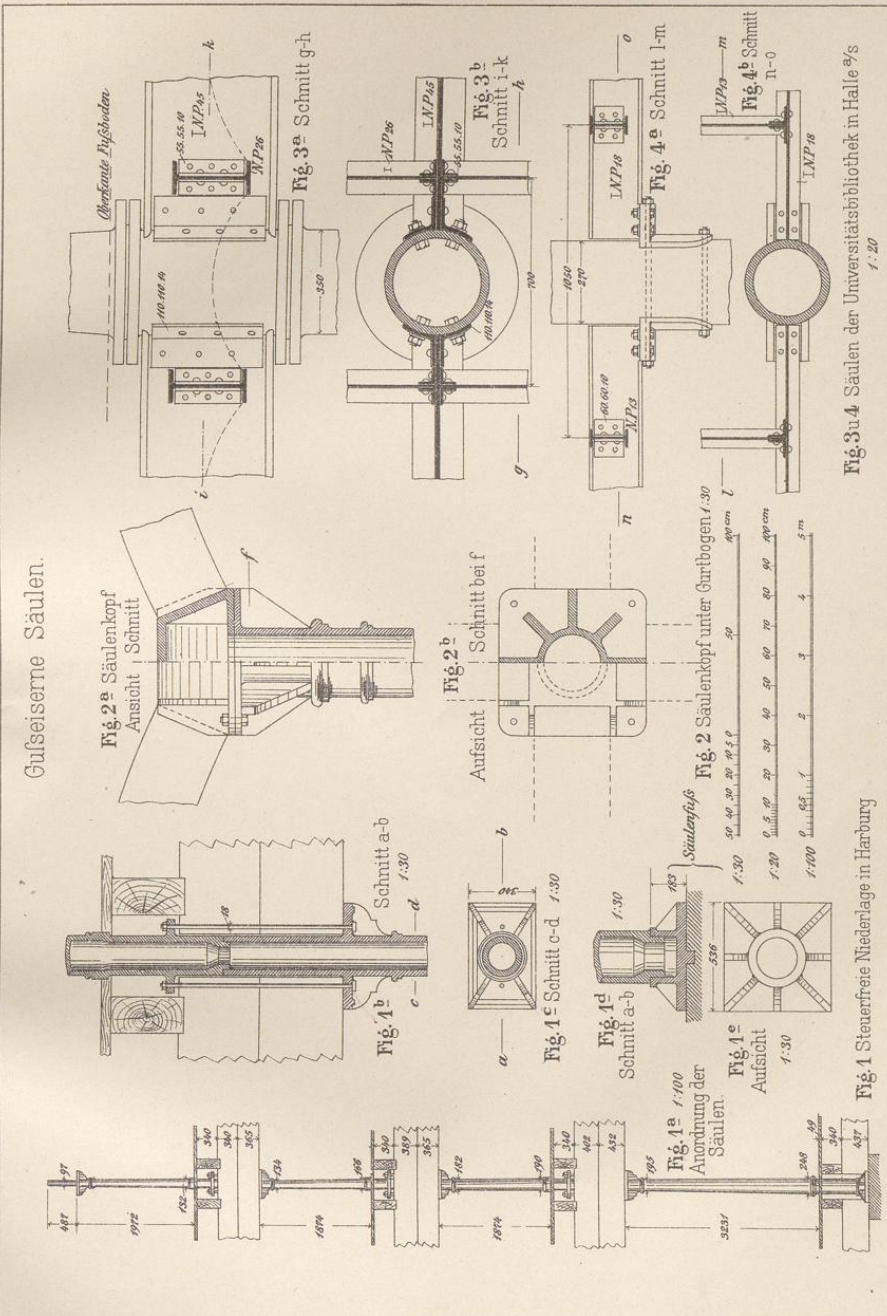
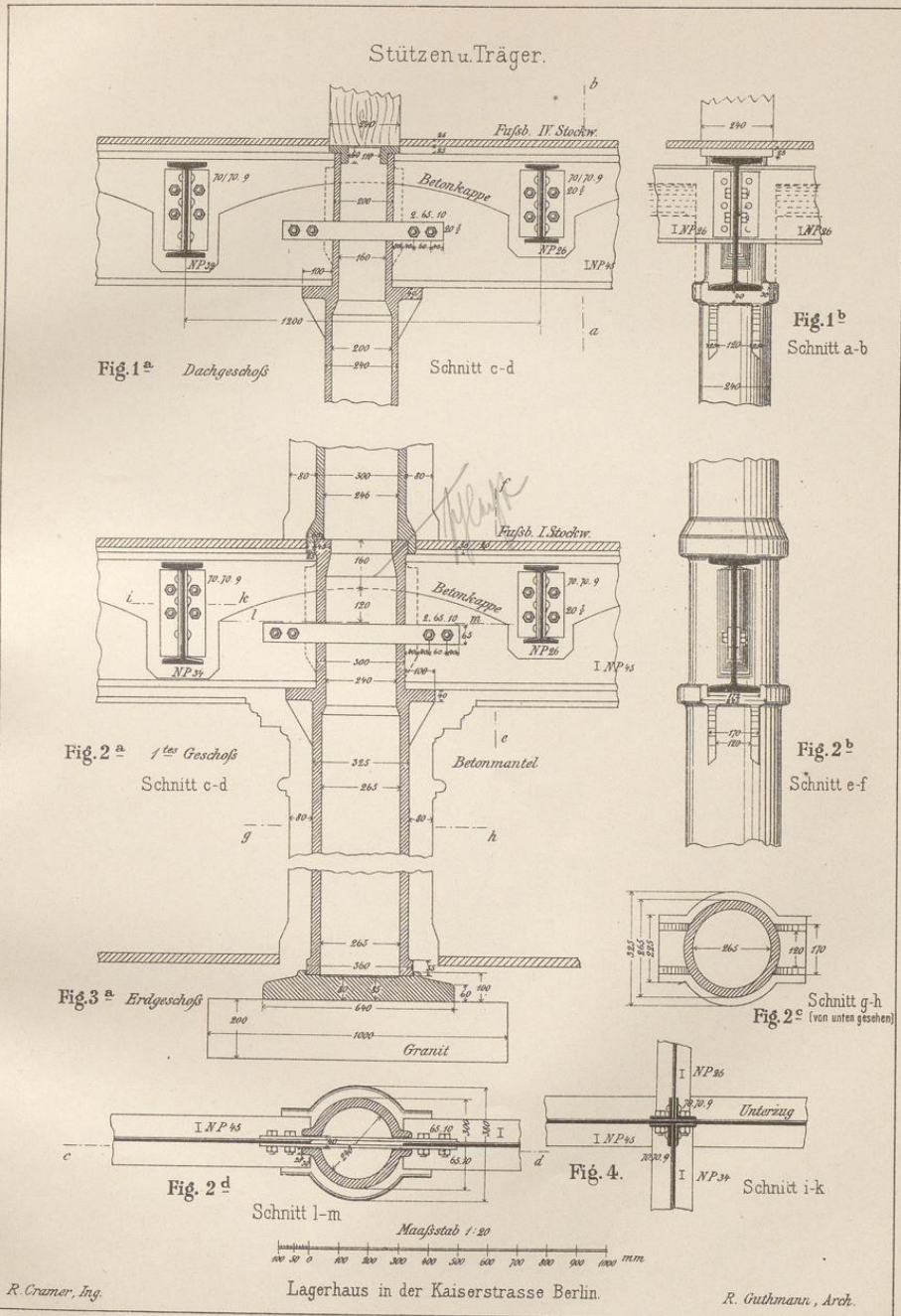


Fig. 3 u. 4 Säulen der Universitätsbibliothek in Halle a/S
1/20

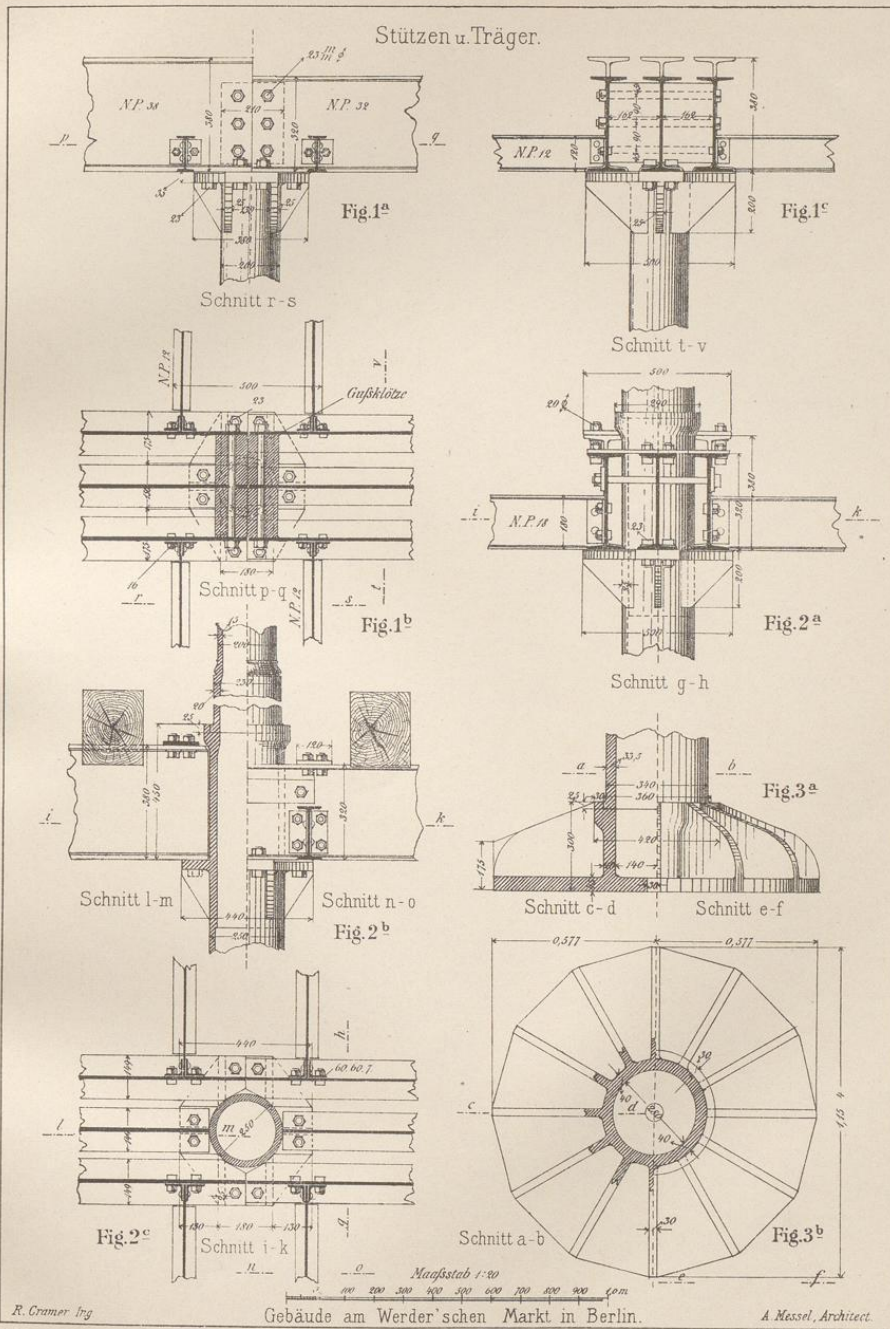
Fig. 1 Steinfreie Niederlage in Harburg

Stützen u. Träger.

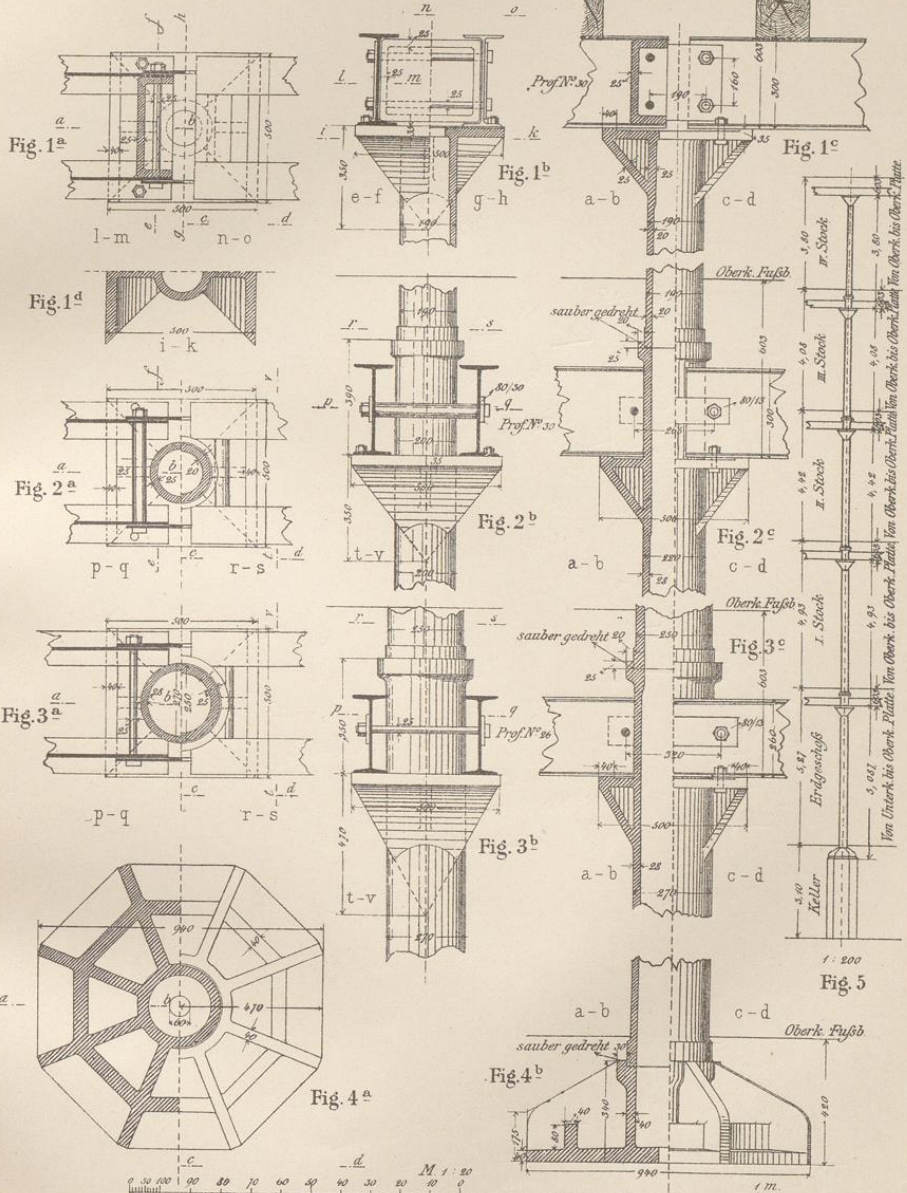


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J.M. Gebhardt's Verlag, Leipzig.



Stützen u. Träger.



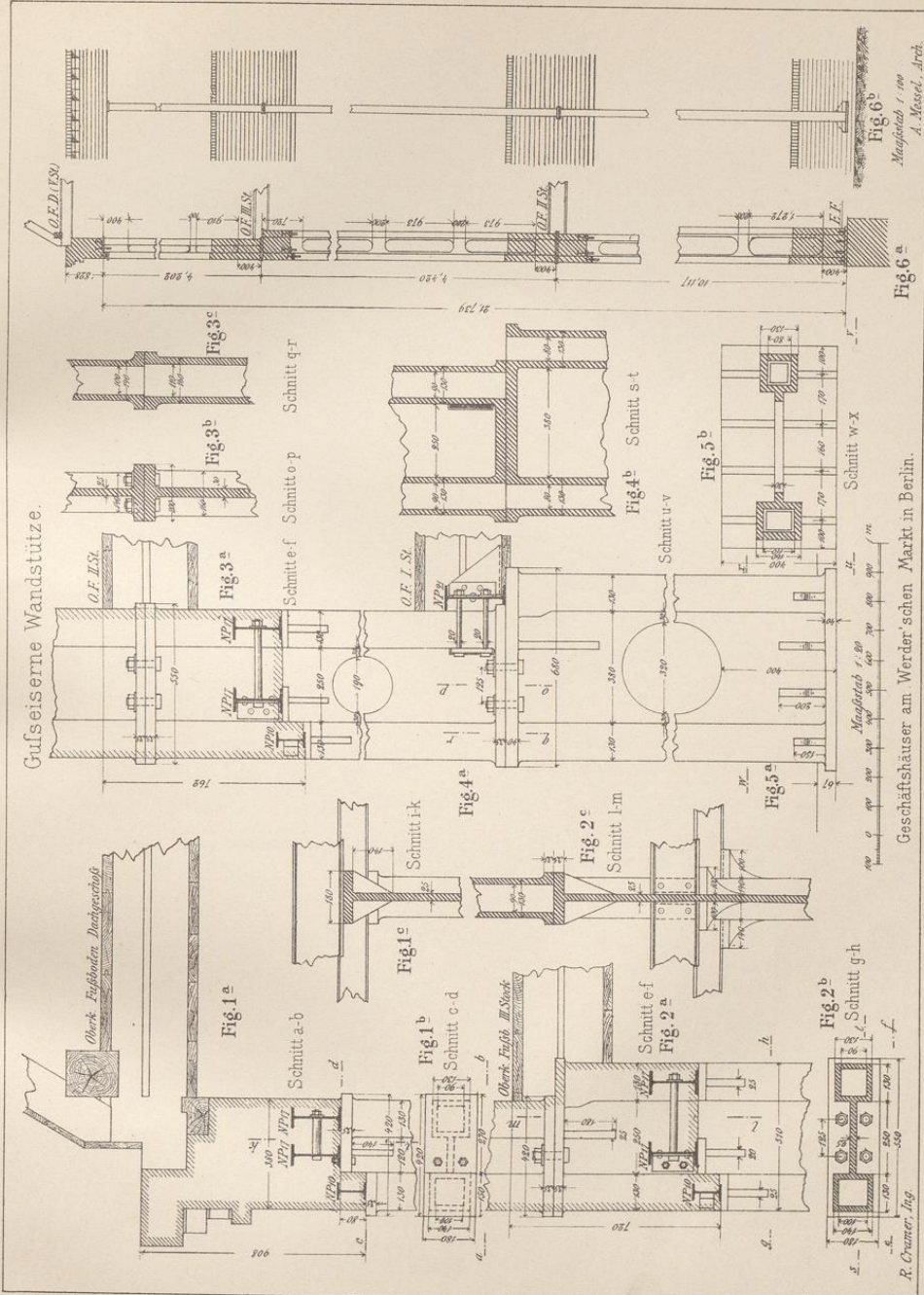
R. Cramer Ing.

Geschäftshäuser am Werder'schen Markt in Berlin.

A. Messel, Arch.

Breymann III Eisen. (6. Aufl.)

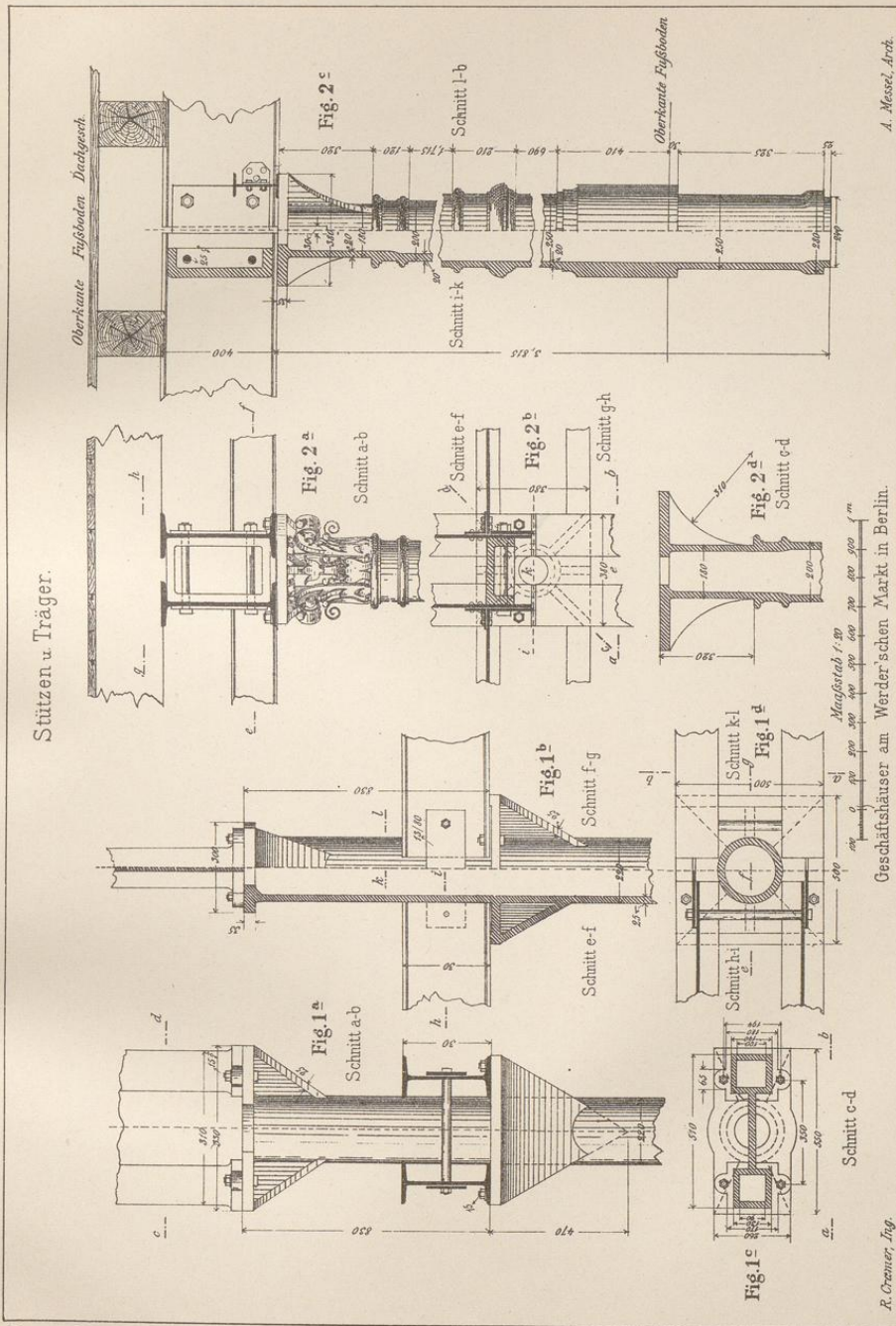
J.M. Gebhardt's Verlag, Leipzig.



Gusseiserne Wandstütze.

Geschäftshäuser am Werderischen Markt in Berlin.

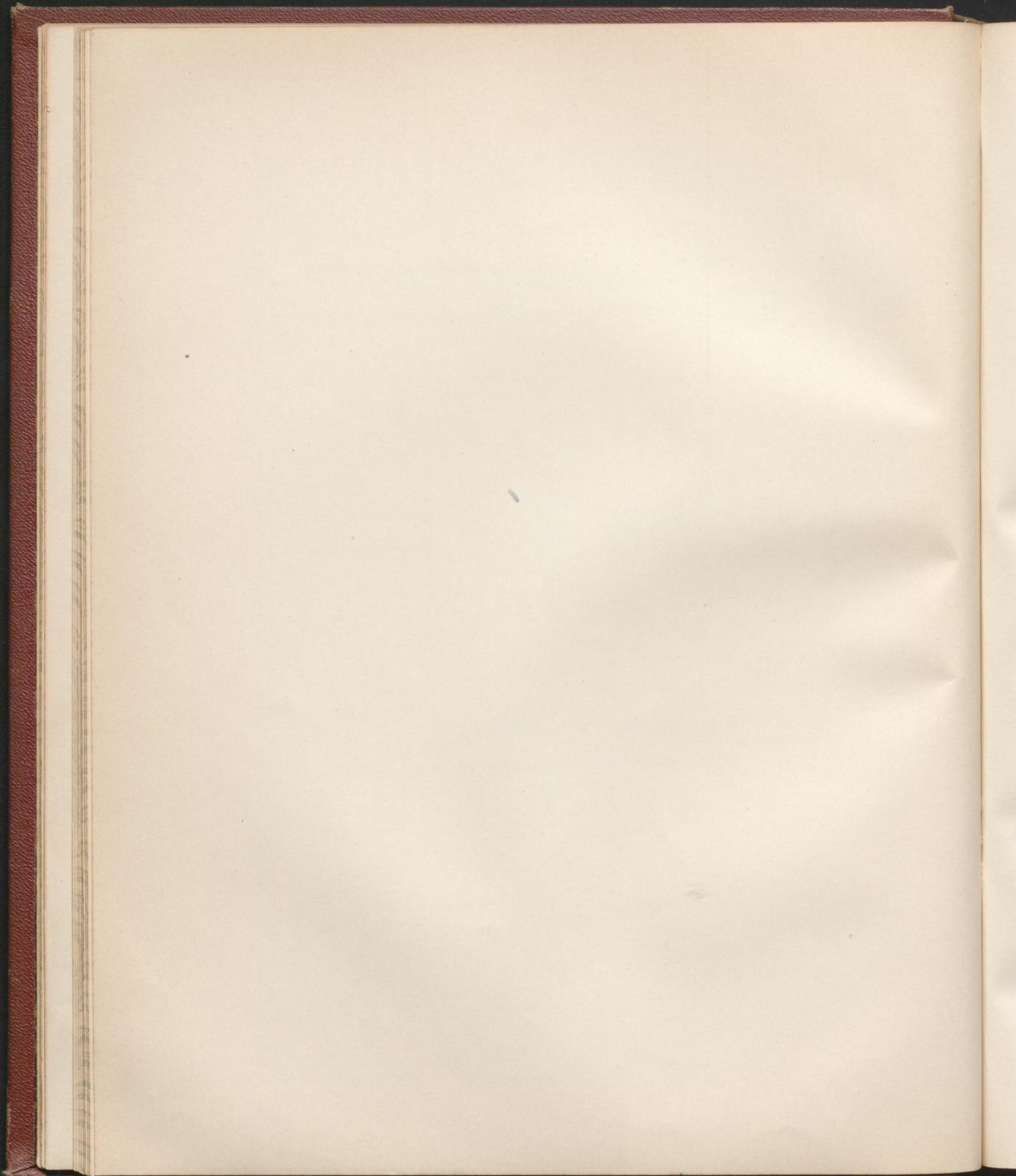
Stützen u. Träger.

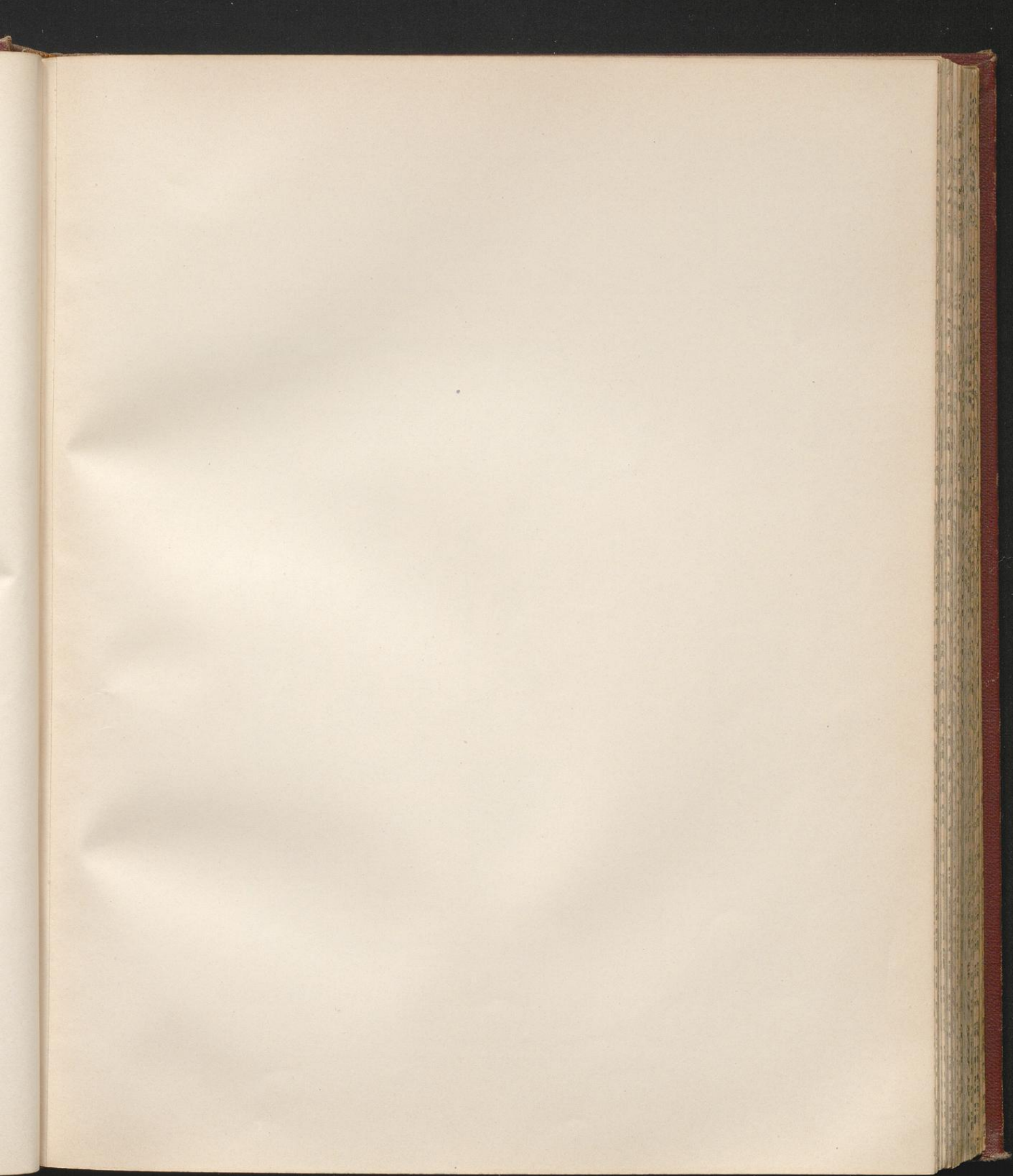


A. Messel, Arch.

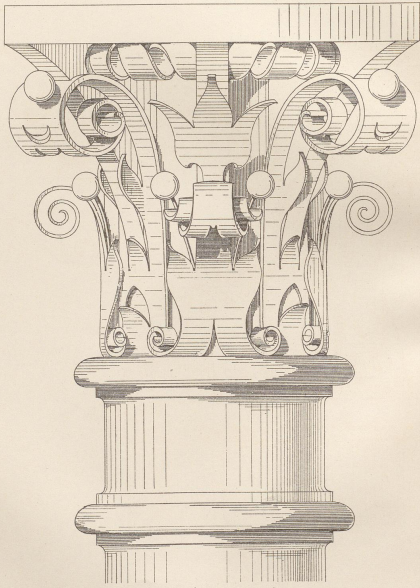
Geschäftshäuser am Werderschen Markt in Berlin.

R. Cremer, Ing.





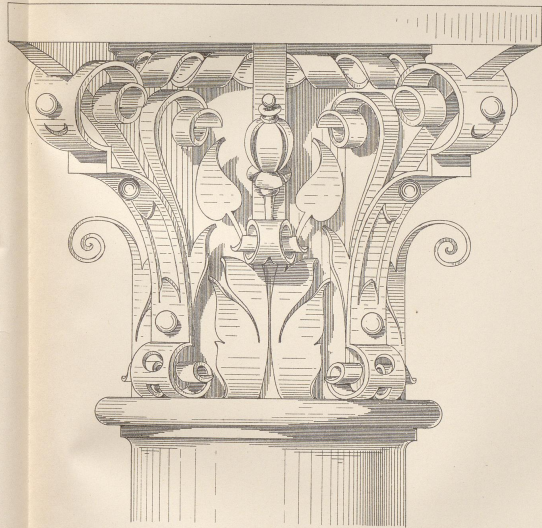
Schmiedeeiserne Capitale auf gußeisernem Säulenkopf



1/3 der nat. Größe

Geschäftshäuser am Werder'schen Markt in Berlin.

Beymann II Eisen (16. Aufl.)



1/3 der nat. Größe

A. Messel, Arch.

J.M. Gebhardt's Verlag, Leipzig

Säulen von Strafsenbrücken der Berliner Stadtbahn.

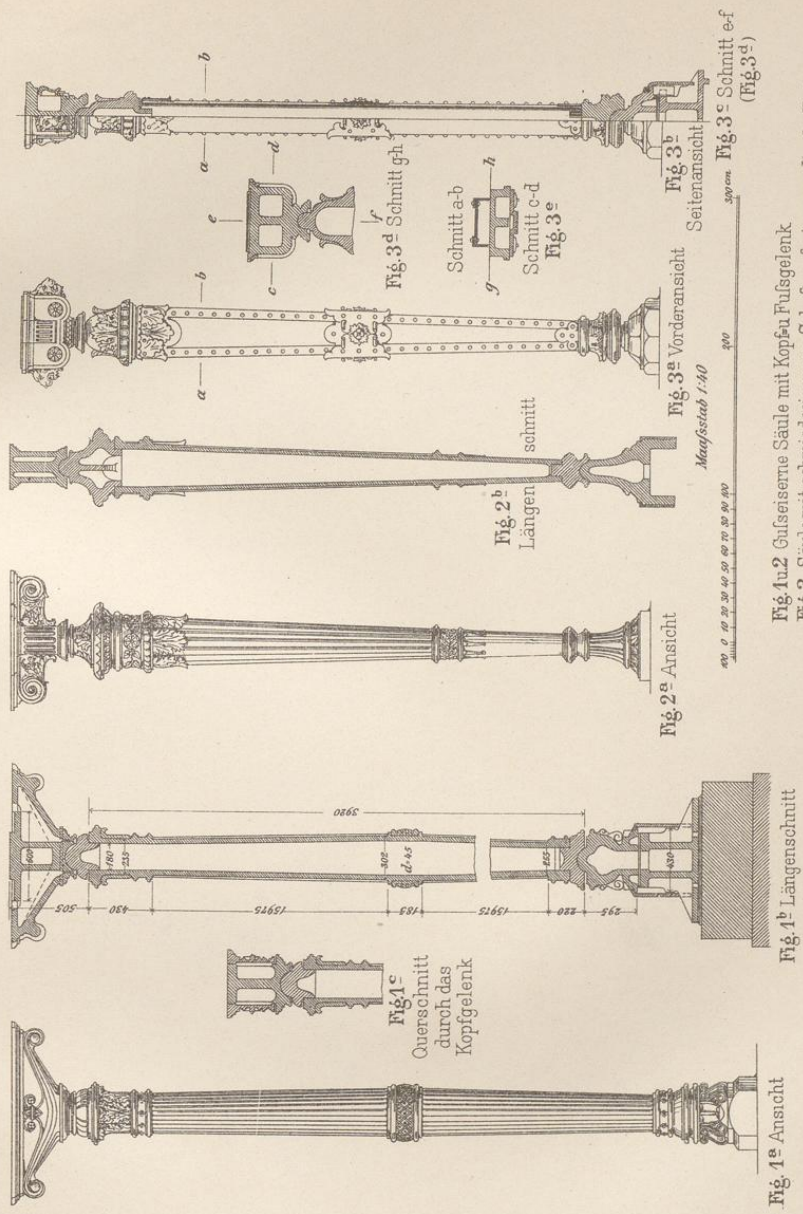
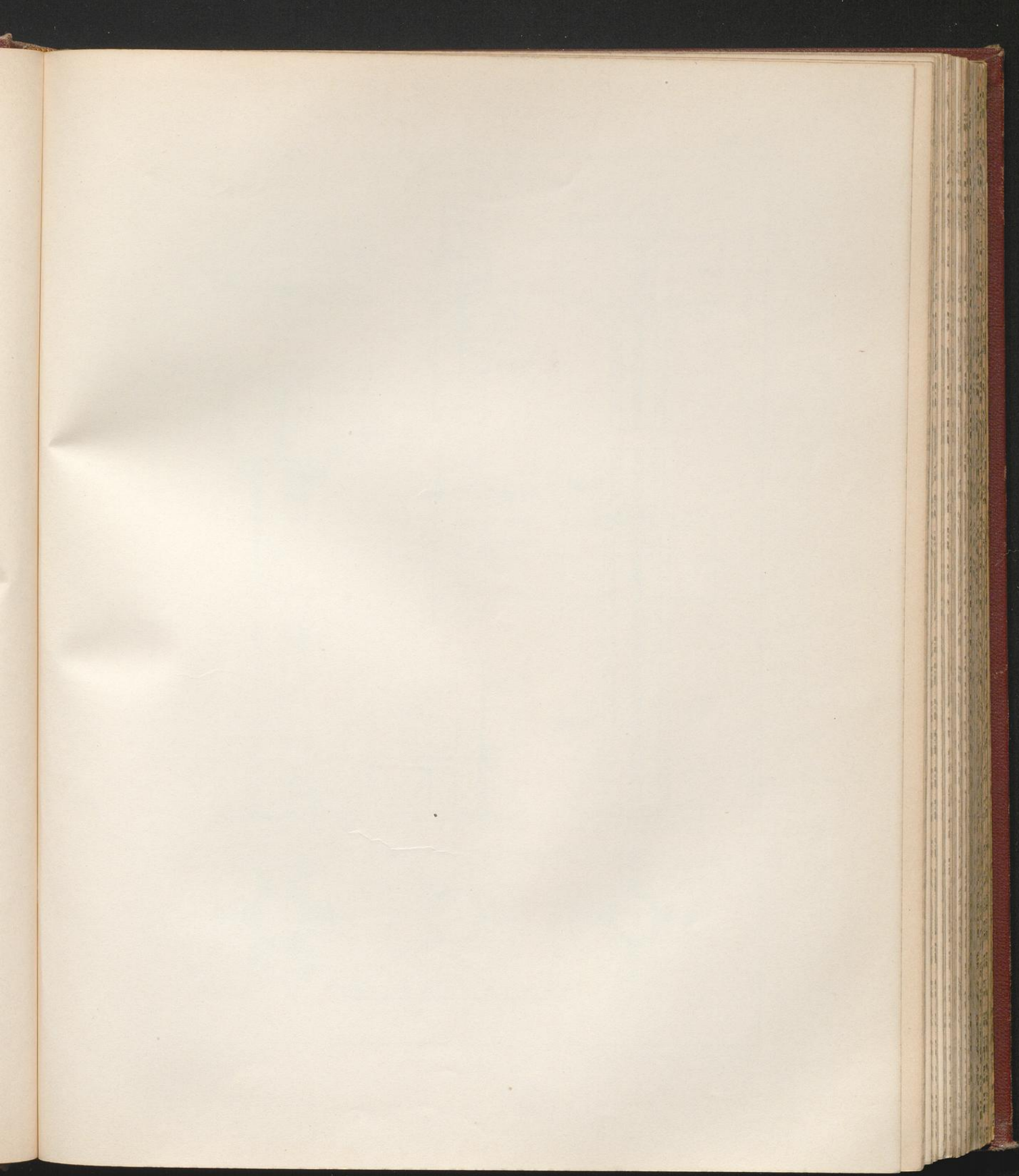
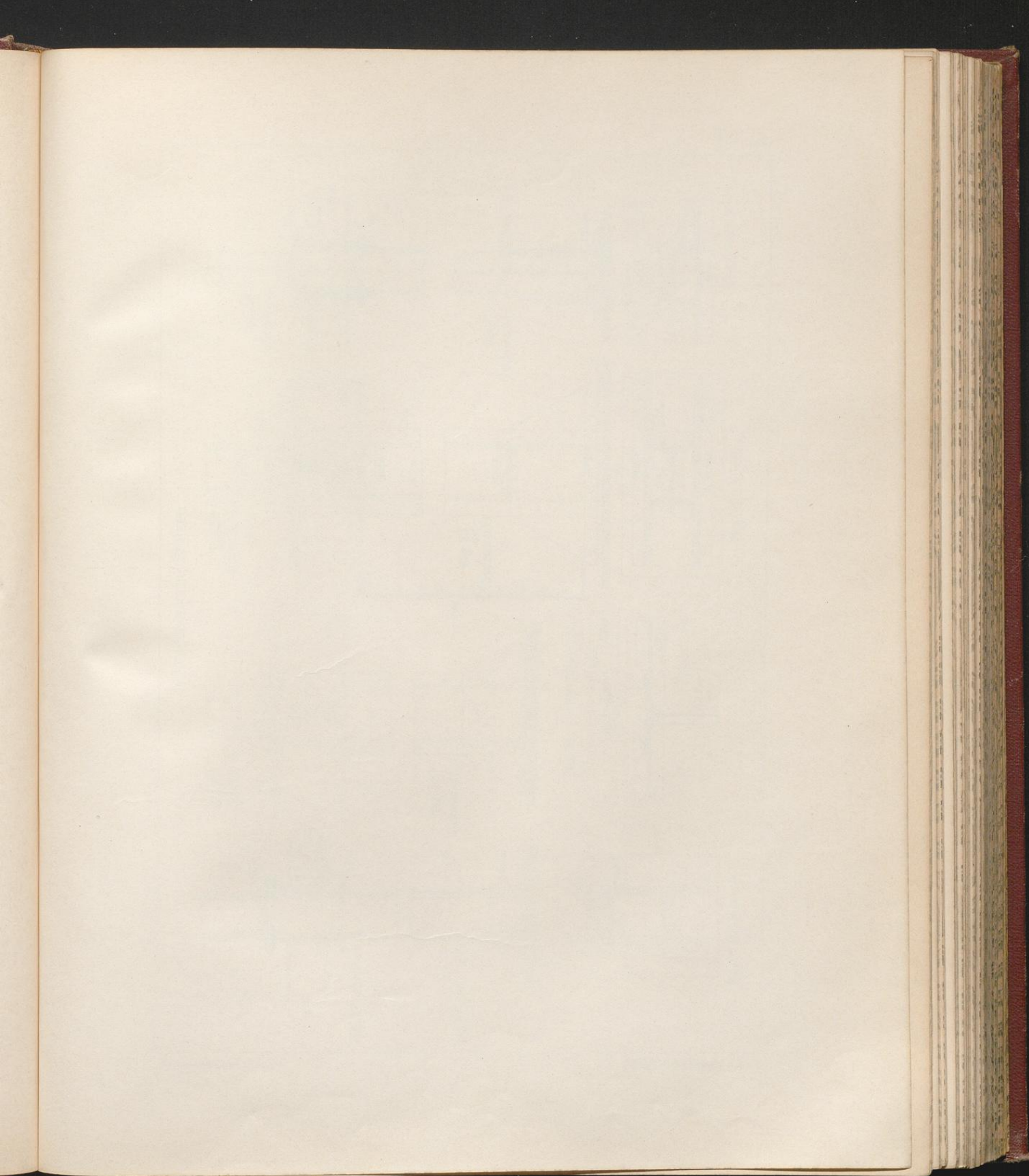
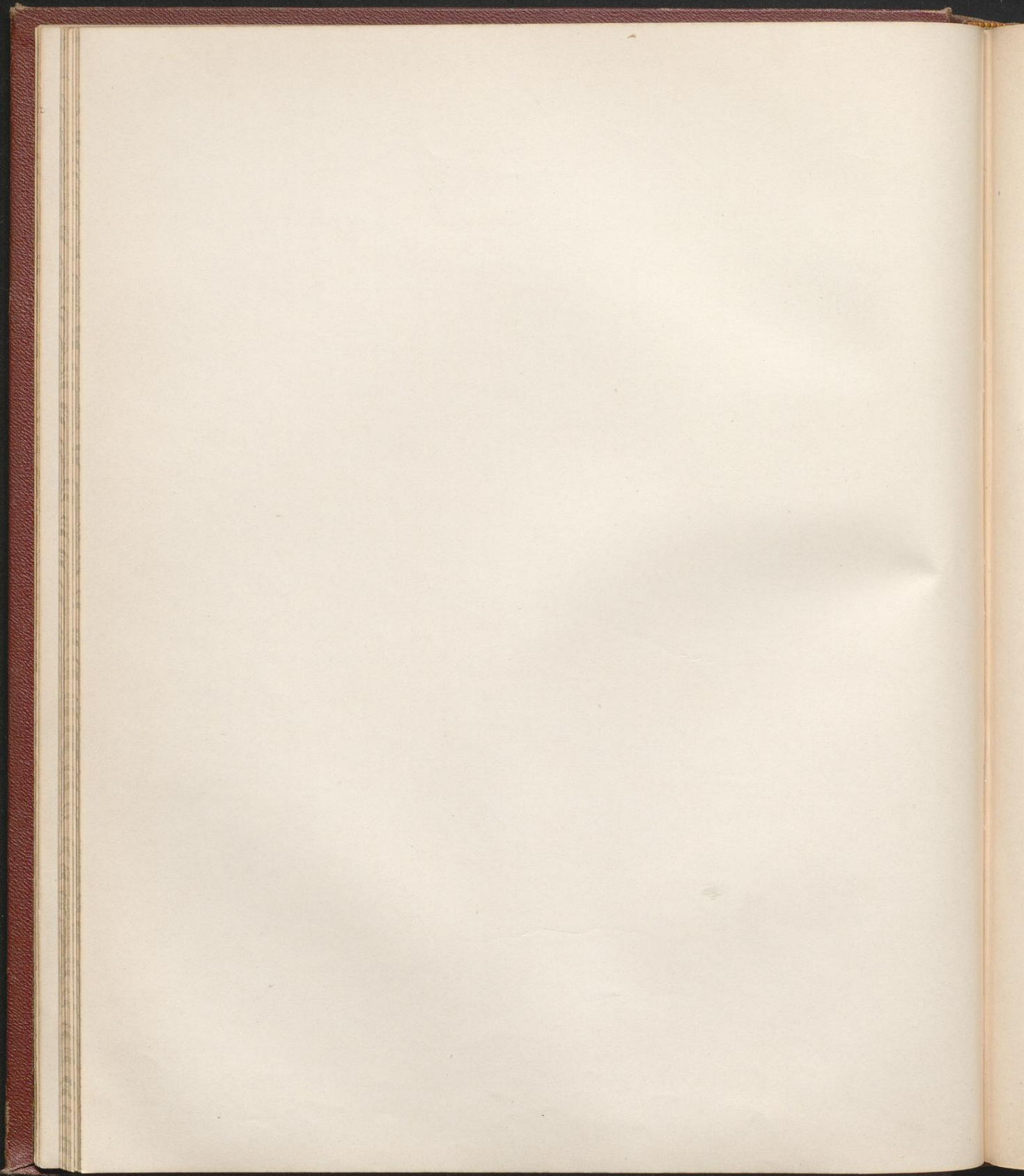


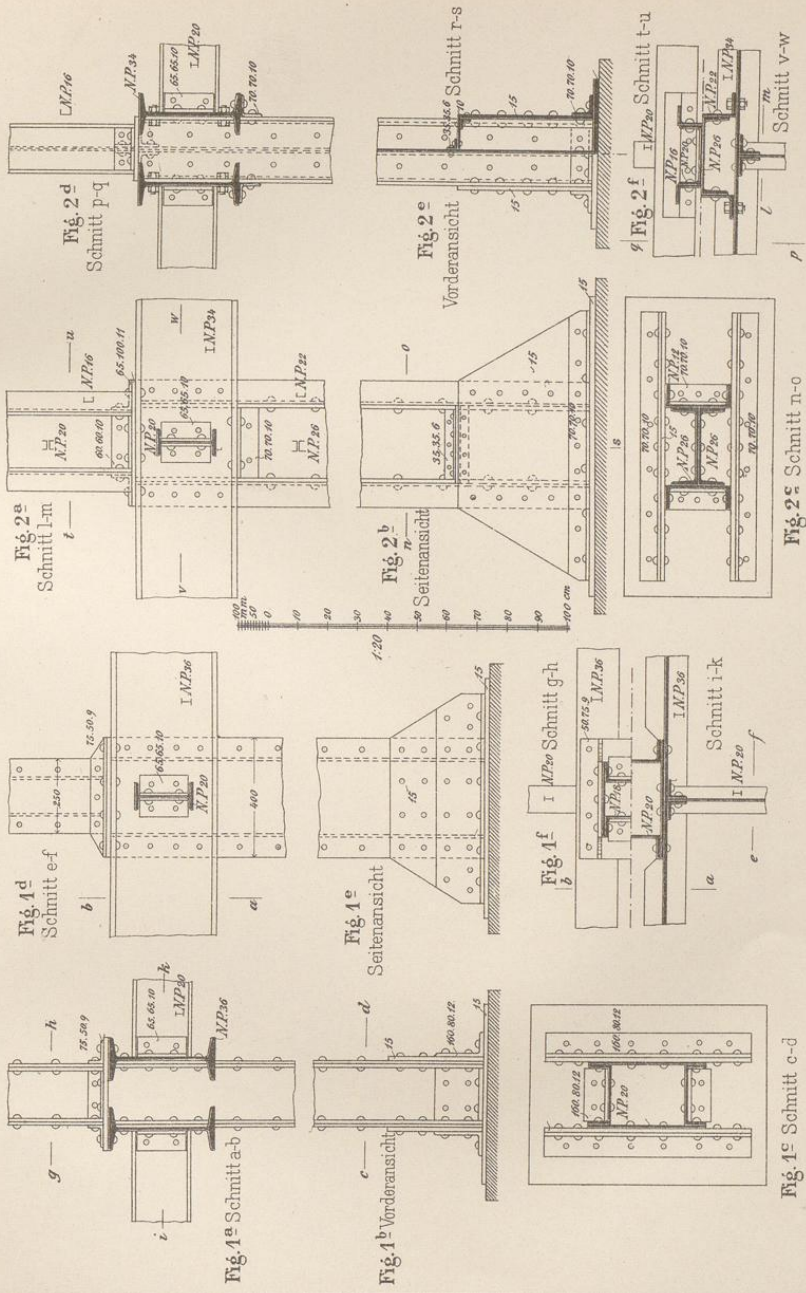
Fig. 1 u. 2 Gufseiserne Säule mit Kopf u. Fußgelenk
Fig. 3 Säule mit schmiedeeisernem Schaft, gußeisernem Kopf u. Fuß



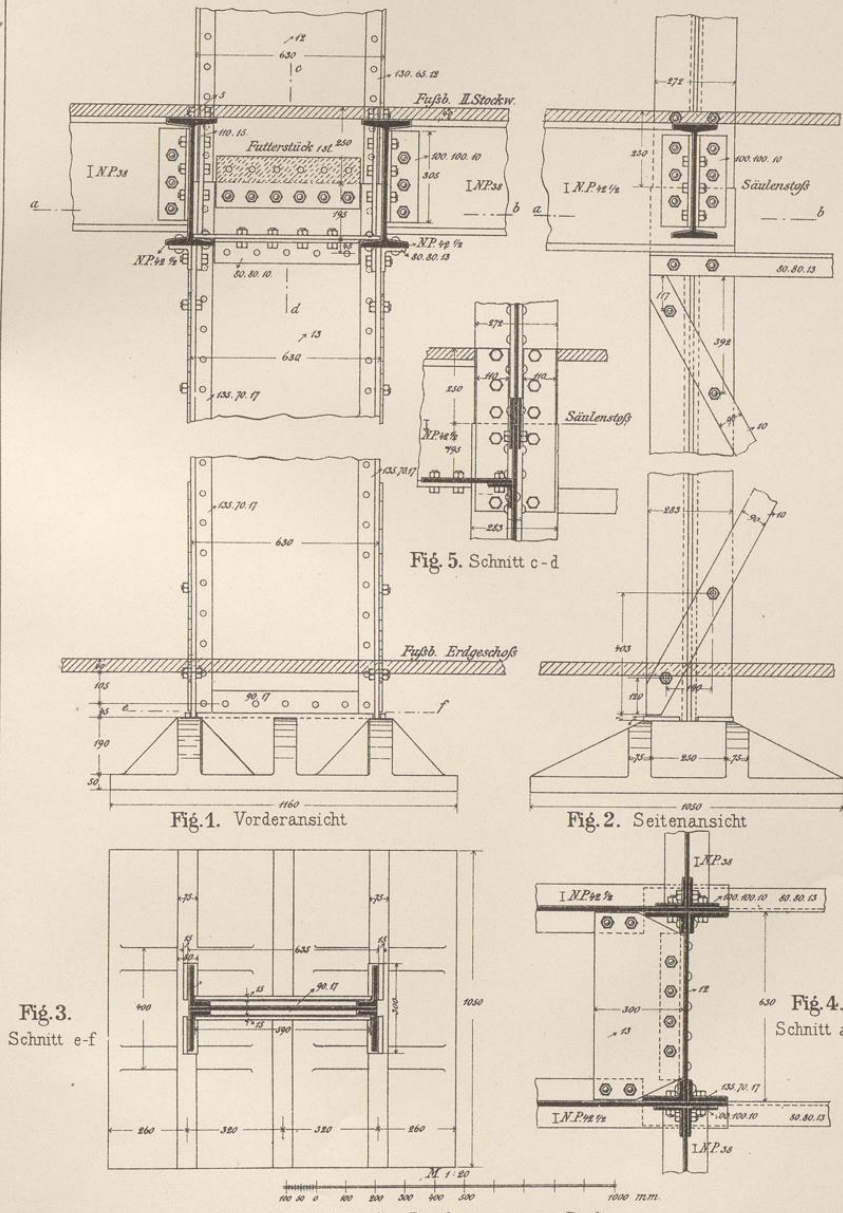




Schmiedeeiserne Stützen.



Schmiedeeiserner Pfeiler.



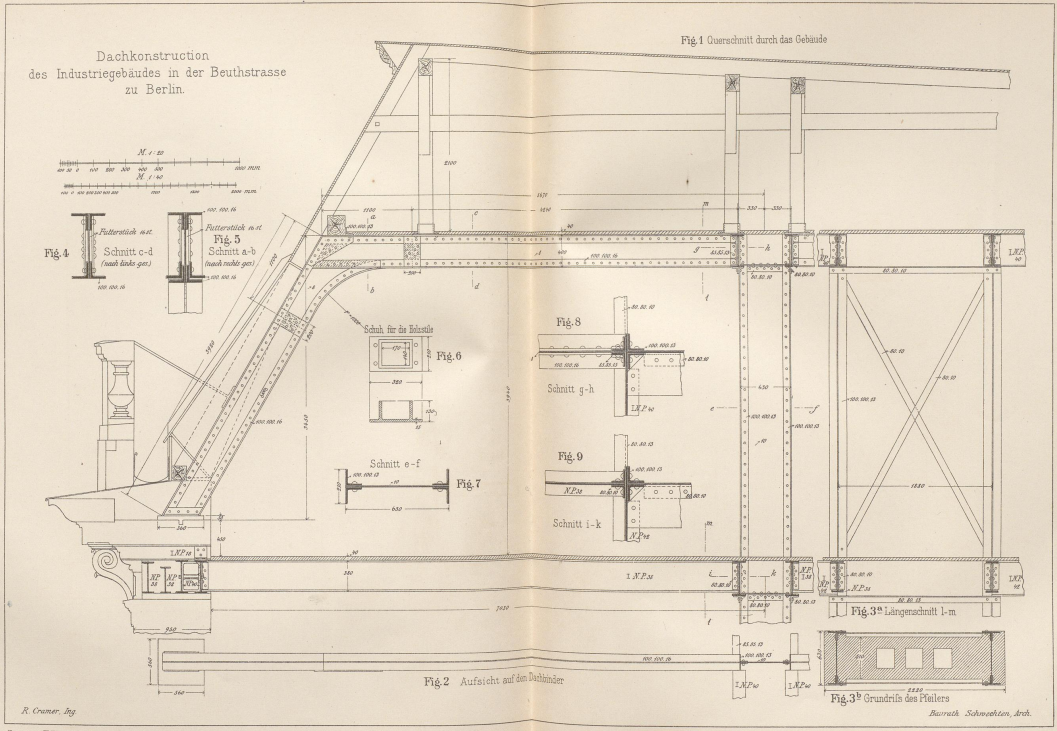
R. Cramer, Ing.
Breymann III Eisen. (6. Aufl.)

Industriegebäude in der Beuthstrasse zu Berlin.

Baurath Schwedchen, Arch.
J.M. Gebhardt's Verlag, Leipzig.

Dachkonstruktion
des Industriegebäudes in der Beuthstrasse
zu Berlin.

Fig. 1 Querschnitt durch das Gebäude



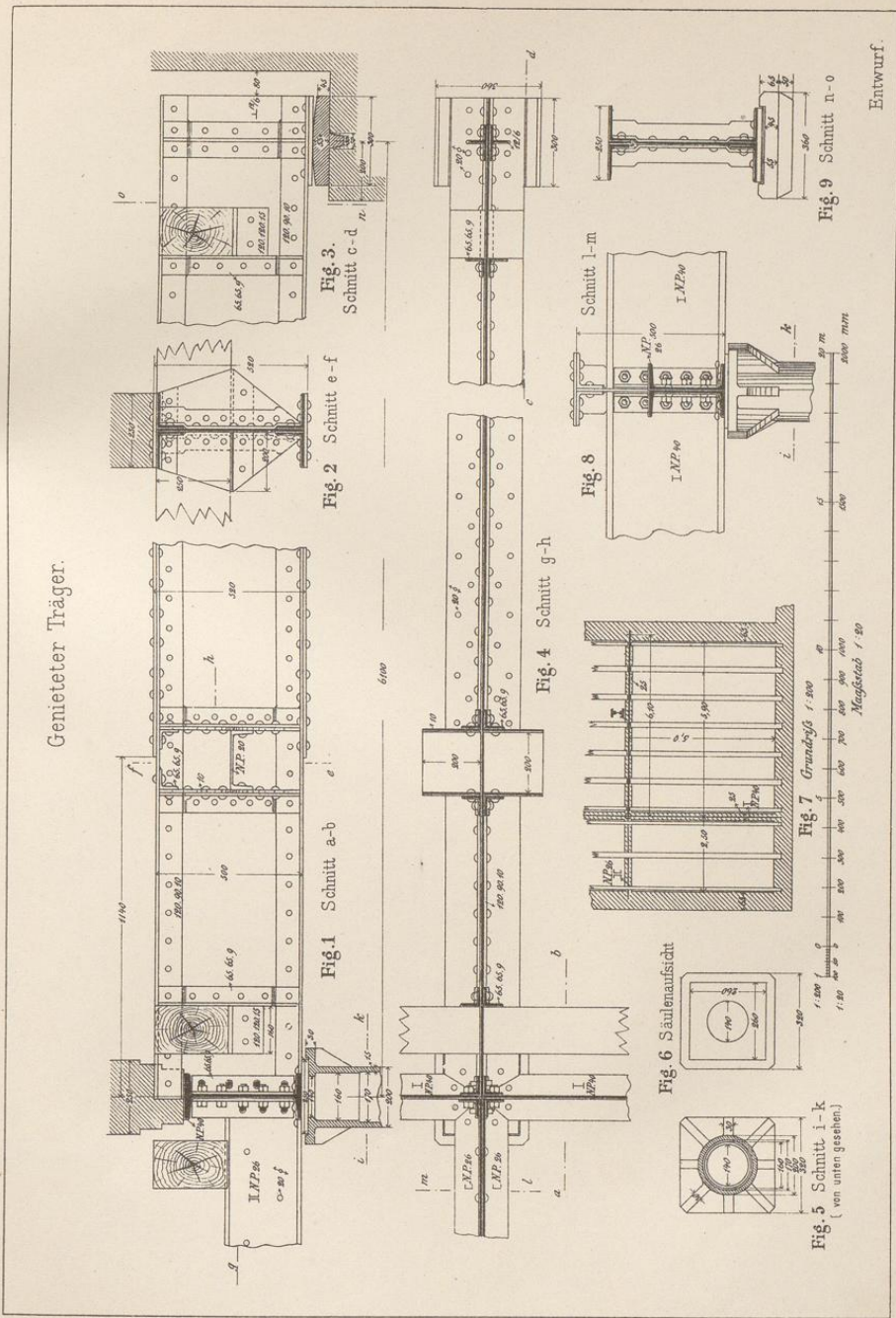
R. Cramer, Ing.

Beppmann H. Eisen. (6. Aufl.)

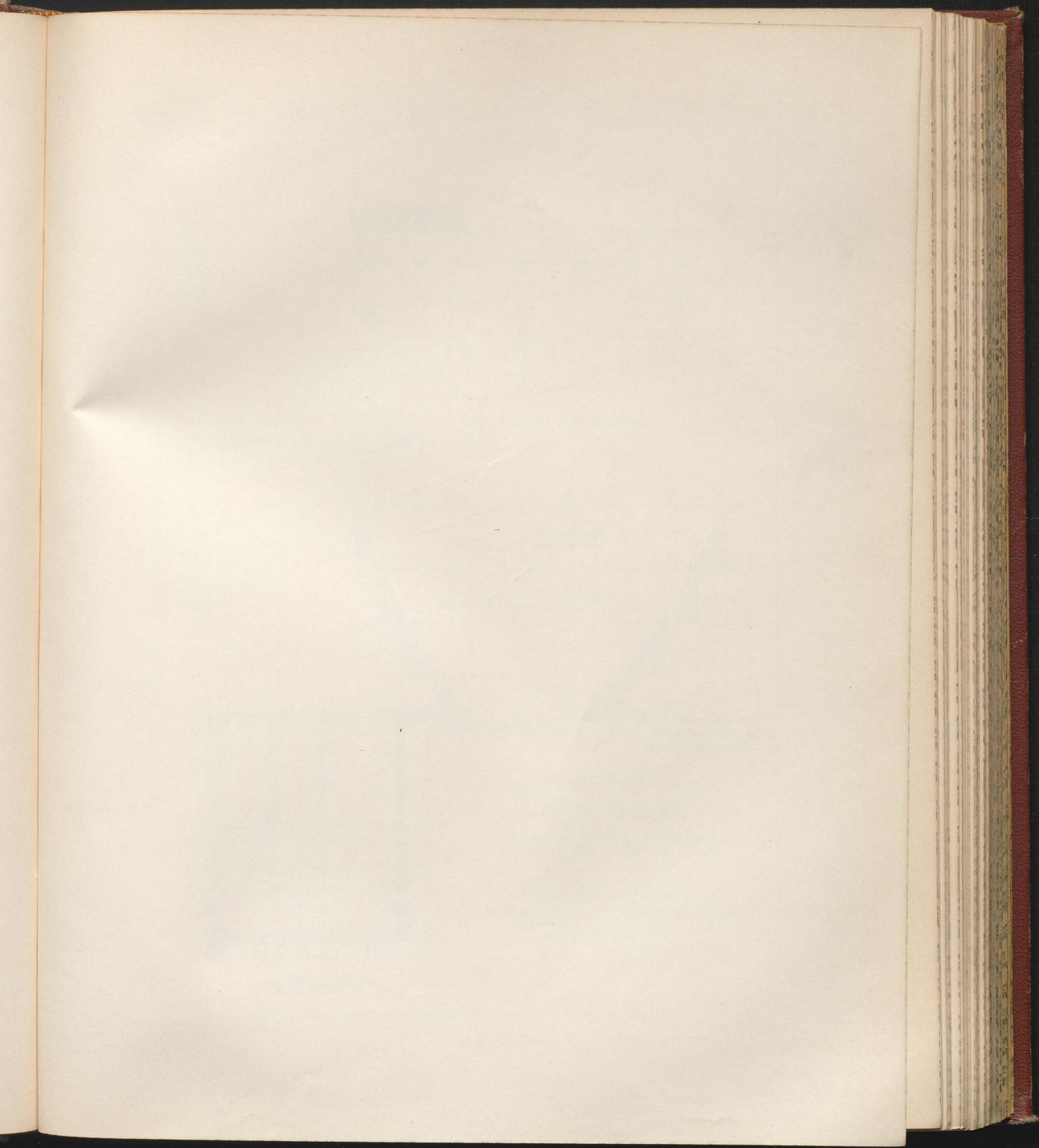
Barruth, Schwanstein, Arch.

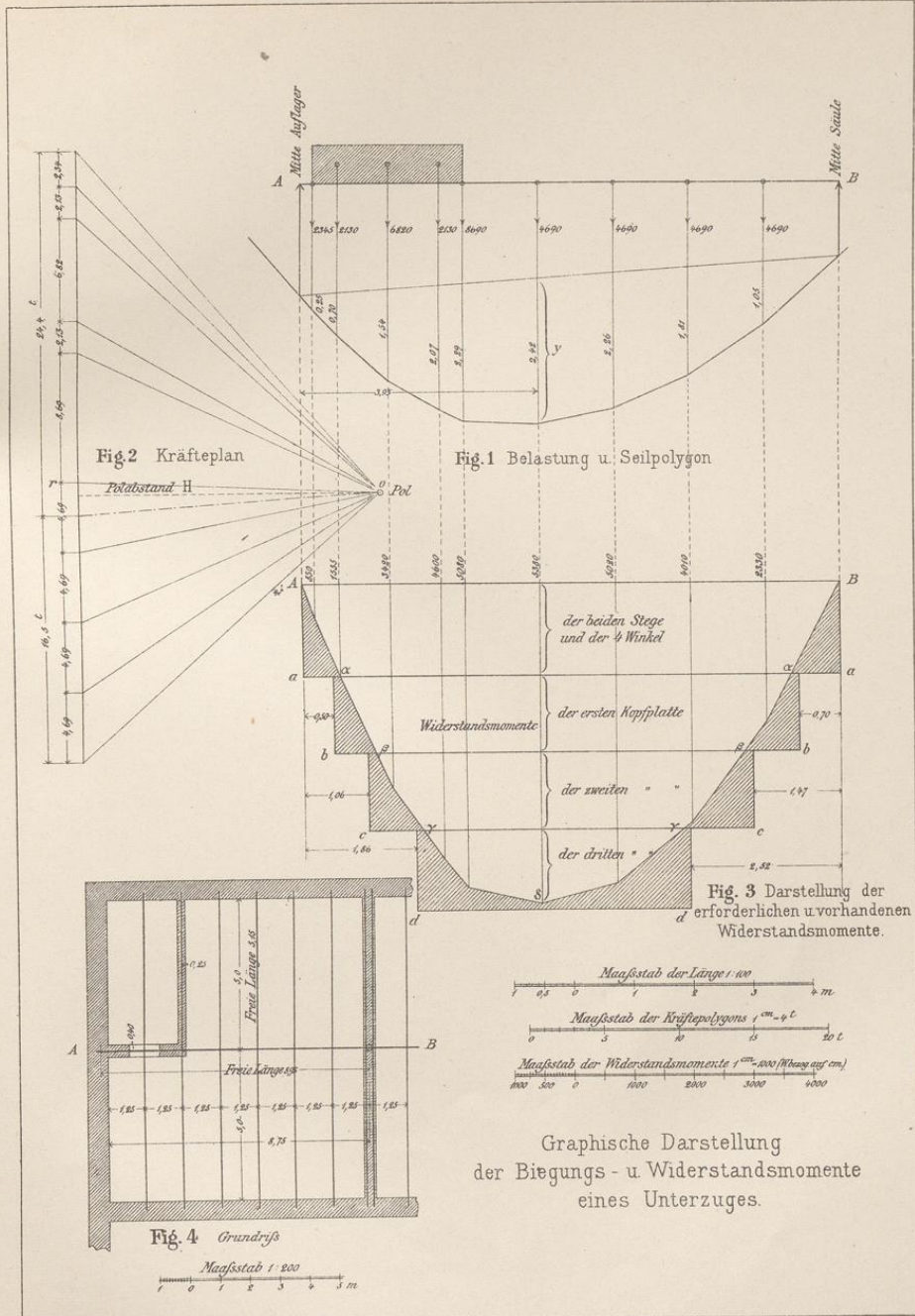
J.M. Gebhardt's Verlag, Leipzig

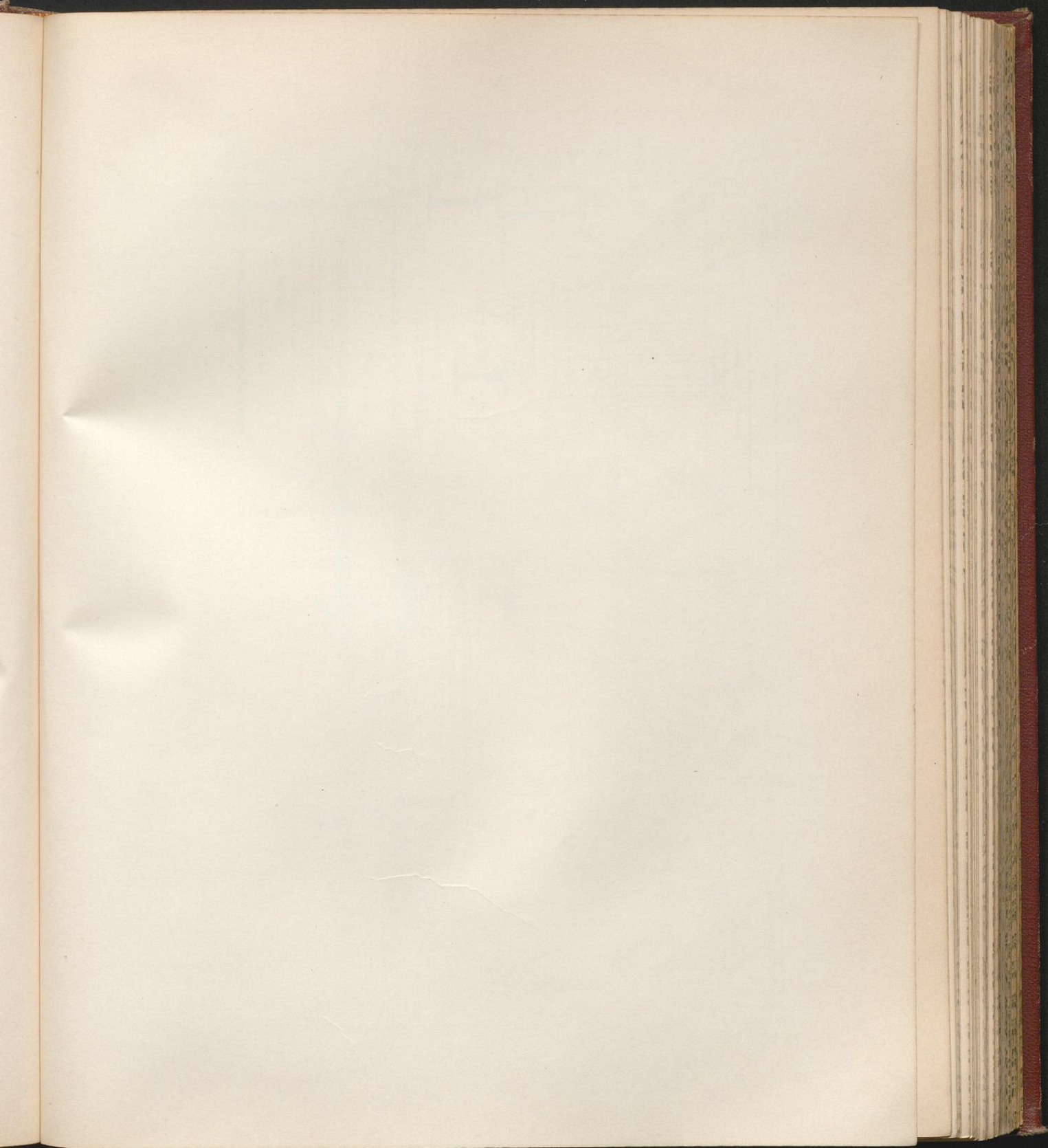
Genieteteter Träger.

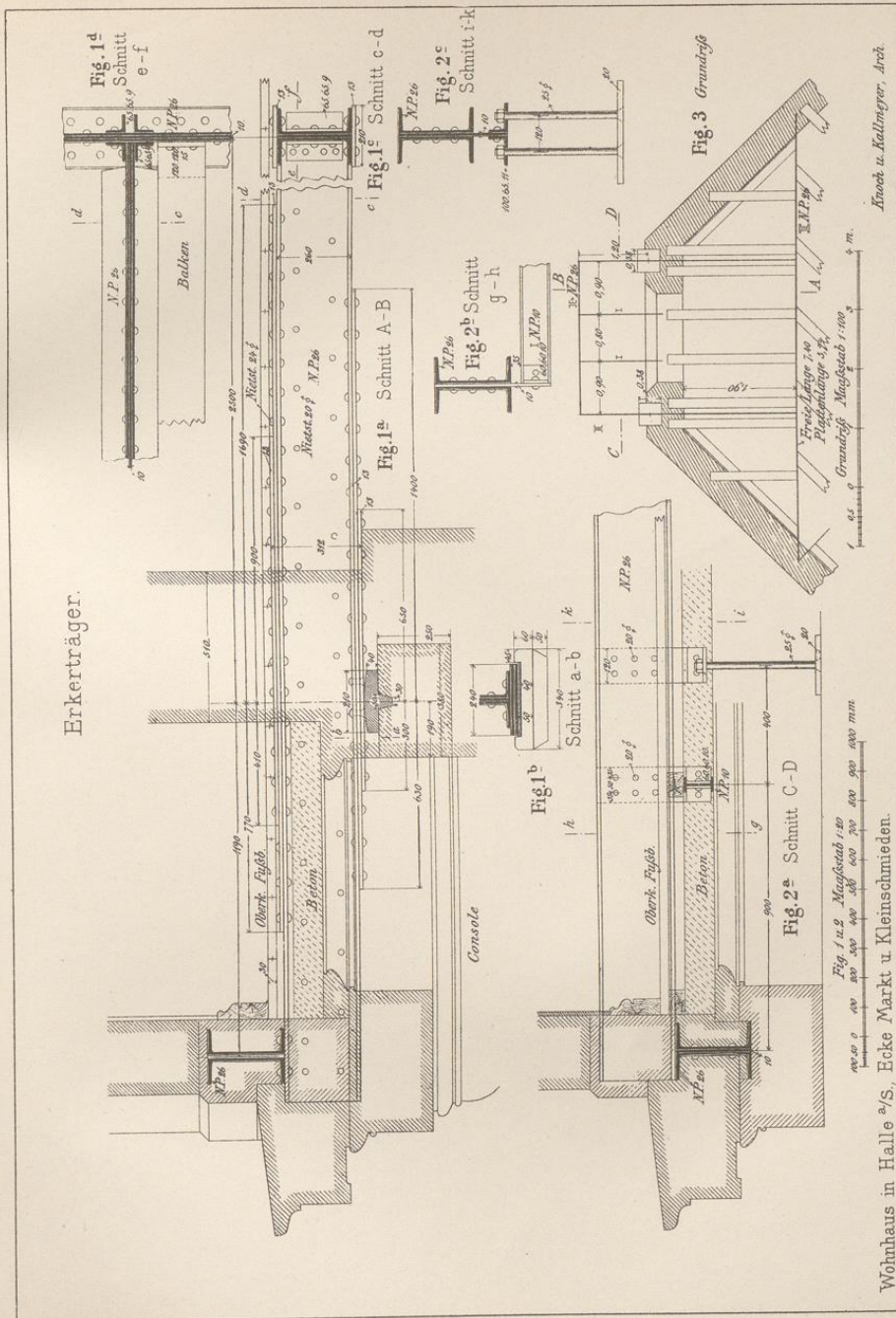


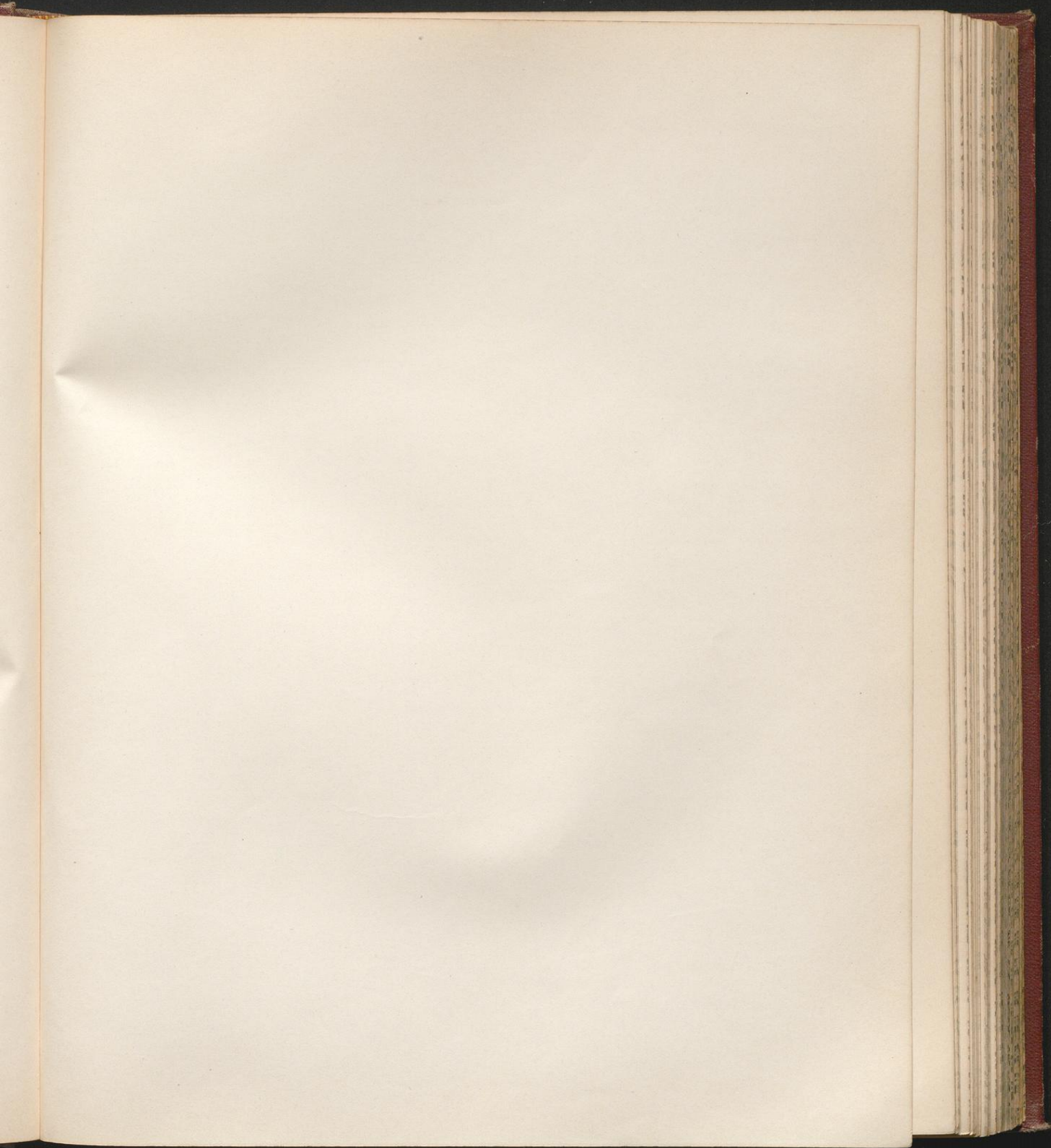
Entwurf.

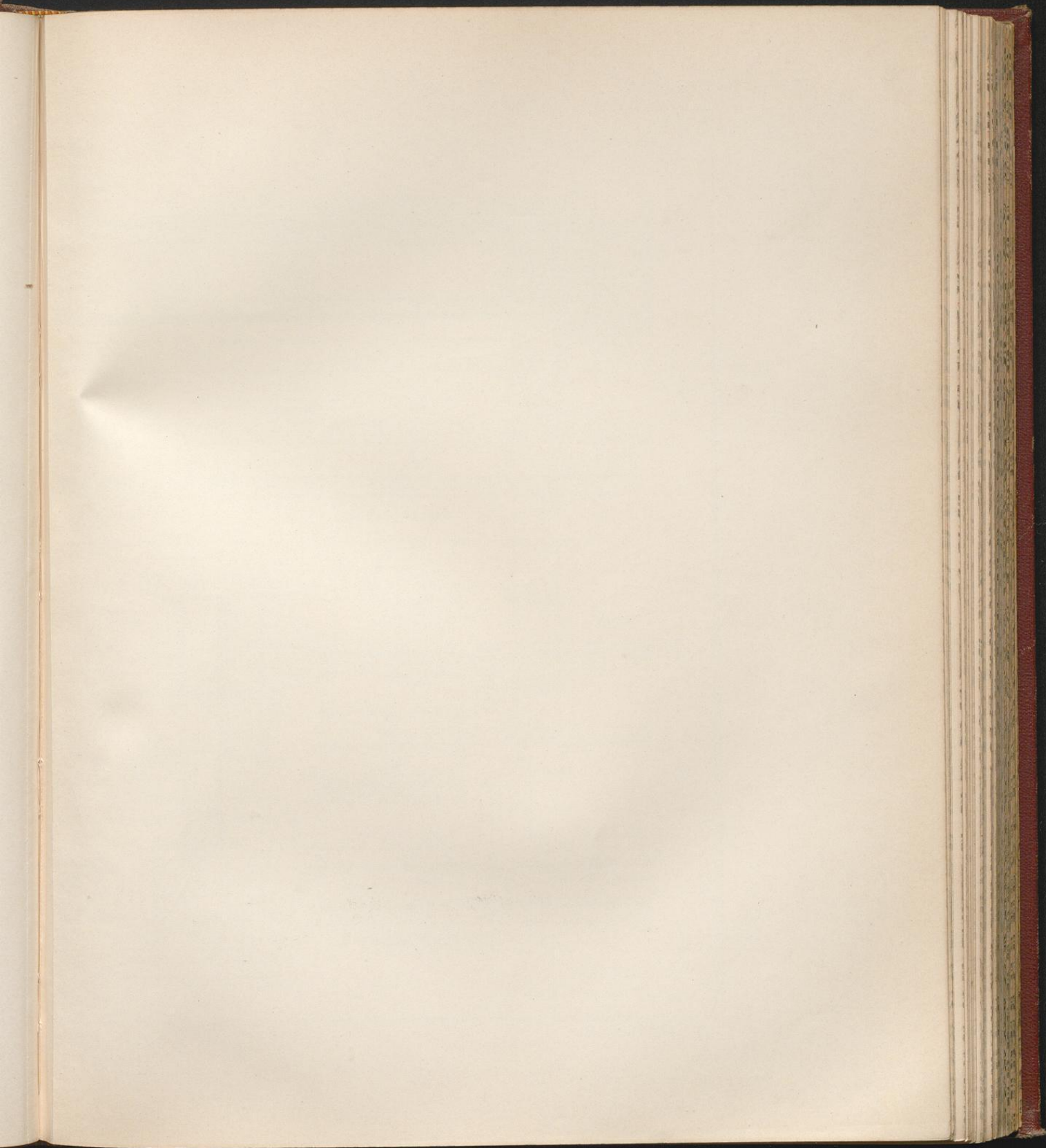












Kastenträger

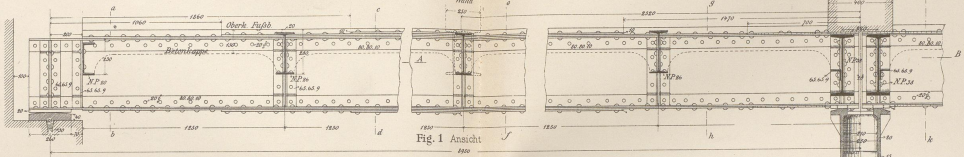


Fig. 1 Ansicht

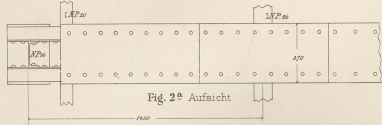


Fig. 2a Aufsicht

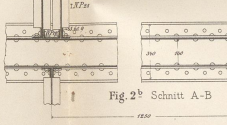


Fig. 2b Schnitt A-B

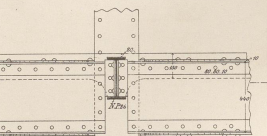
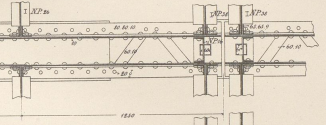


Fig. 3a Schnitt e-f

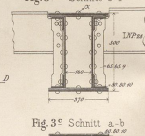


Fig. 3b Schnitt g-h

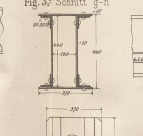


Fig. 3c Schnitt i-k

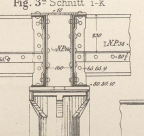


Fig. 3d Schnitt l-m

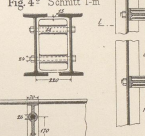


Fig. 3e Schnitt n-o

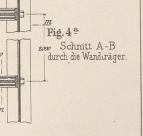


Fig. 4a Schnitt A-B durch die Wandträger

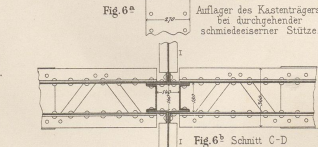


Fig. 6a Aufsicht des Kastenträgers bei durchgehender schmiedeeiserner Stütze

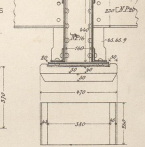


Fig. 3f Schnitt a-b

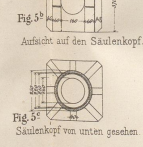


Fig. 3g Aufsicht auf den Säulenkopf

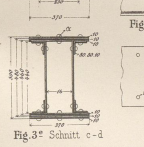


Fig. 3h Säulenkopf von unten gesehen

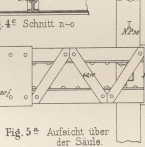


Fig. 3h Schnitt c-d

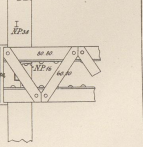
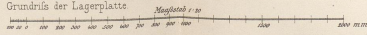
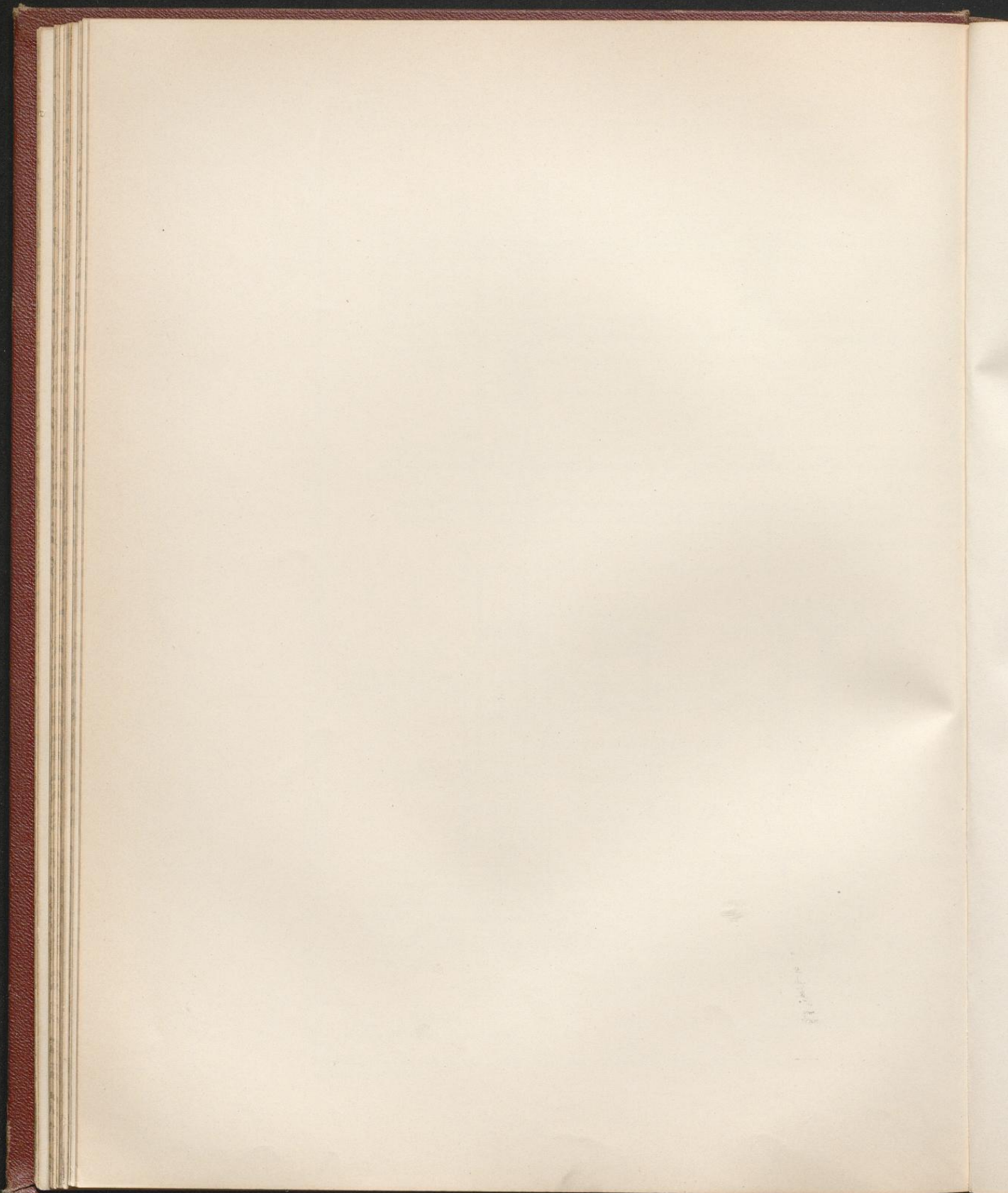


Fig. 5a Aufsicht über der Säule

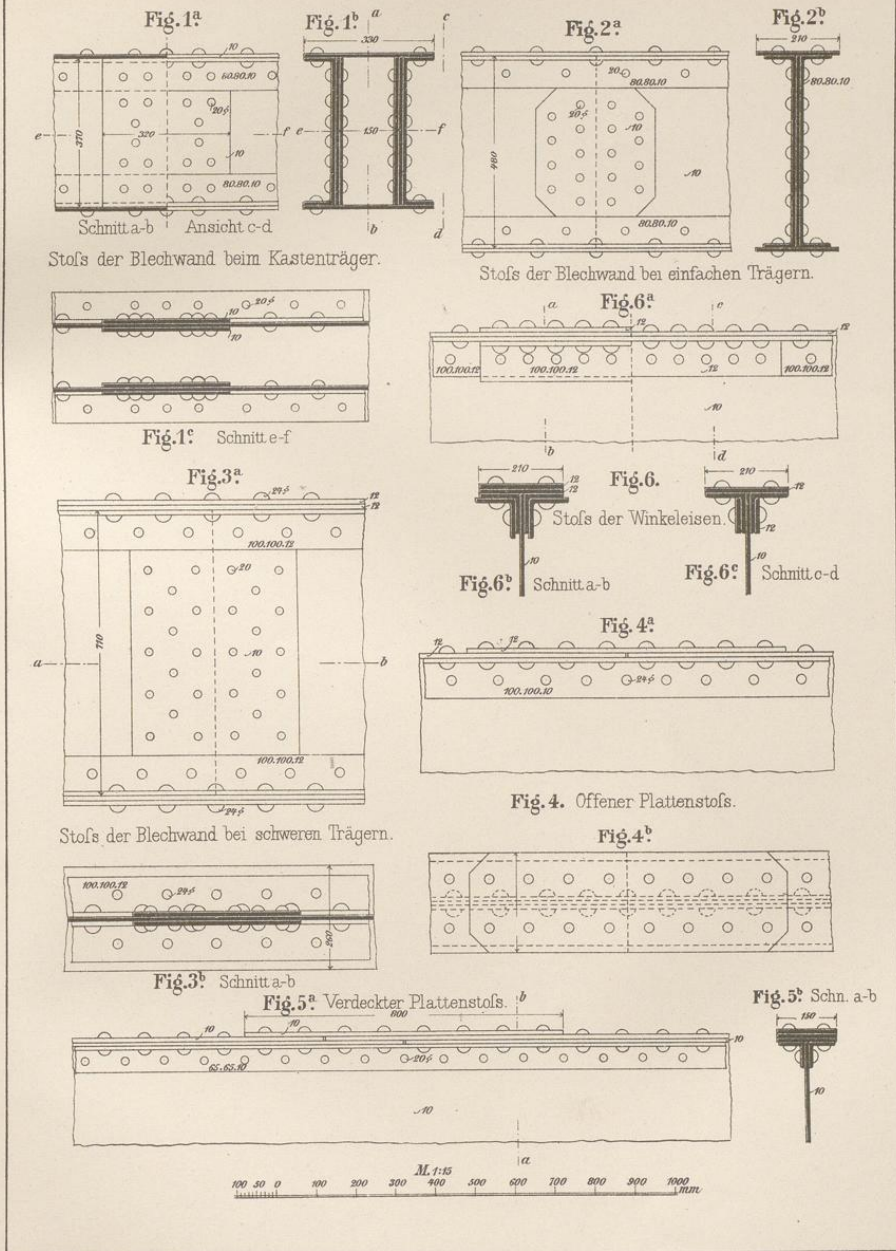


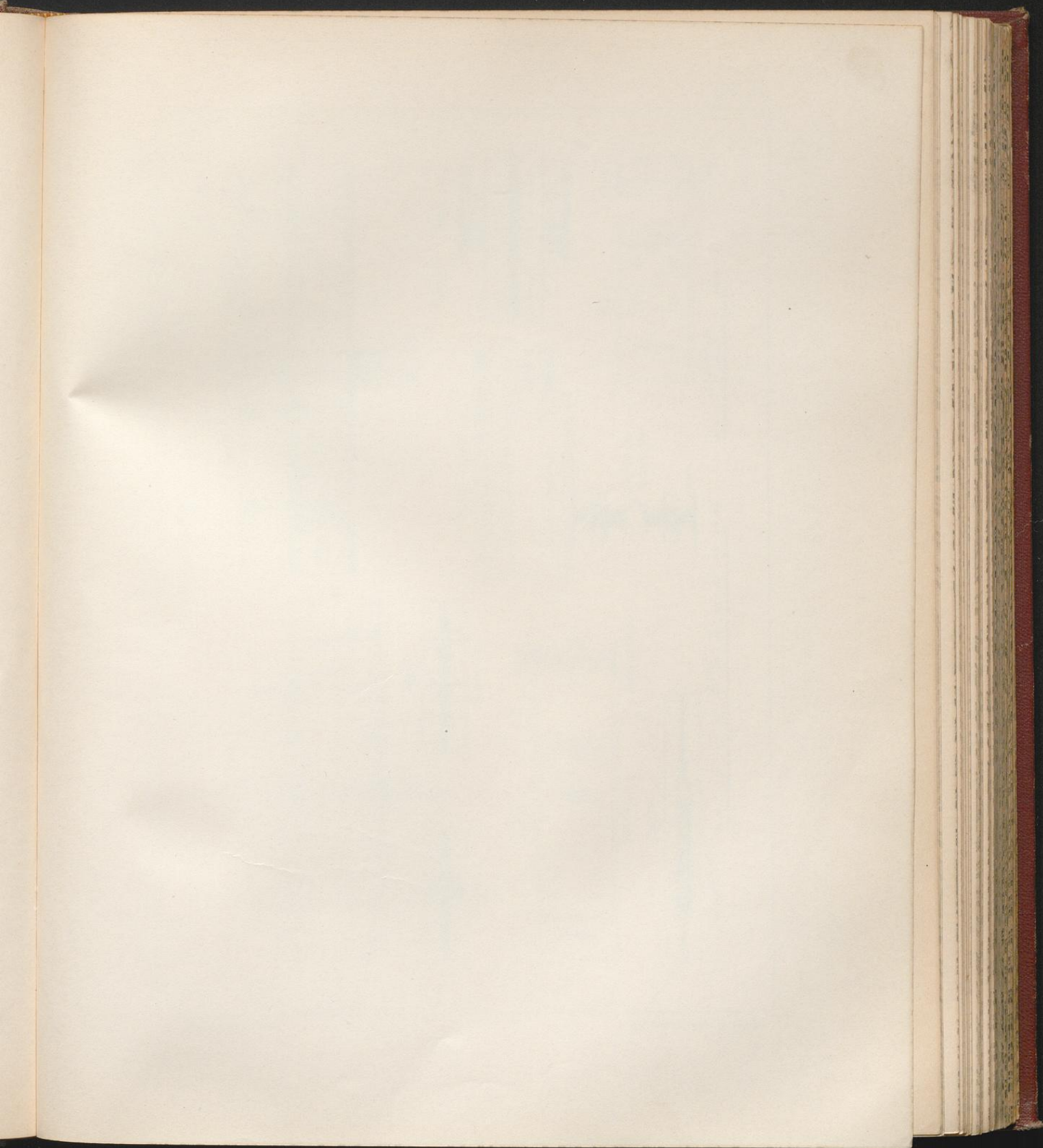
Grundriss der Lagerplatte

Entwurf
Grundriss hierzu siehe Taf. 6, Fig. 4

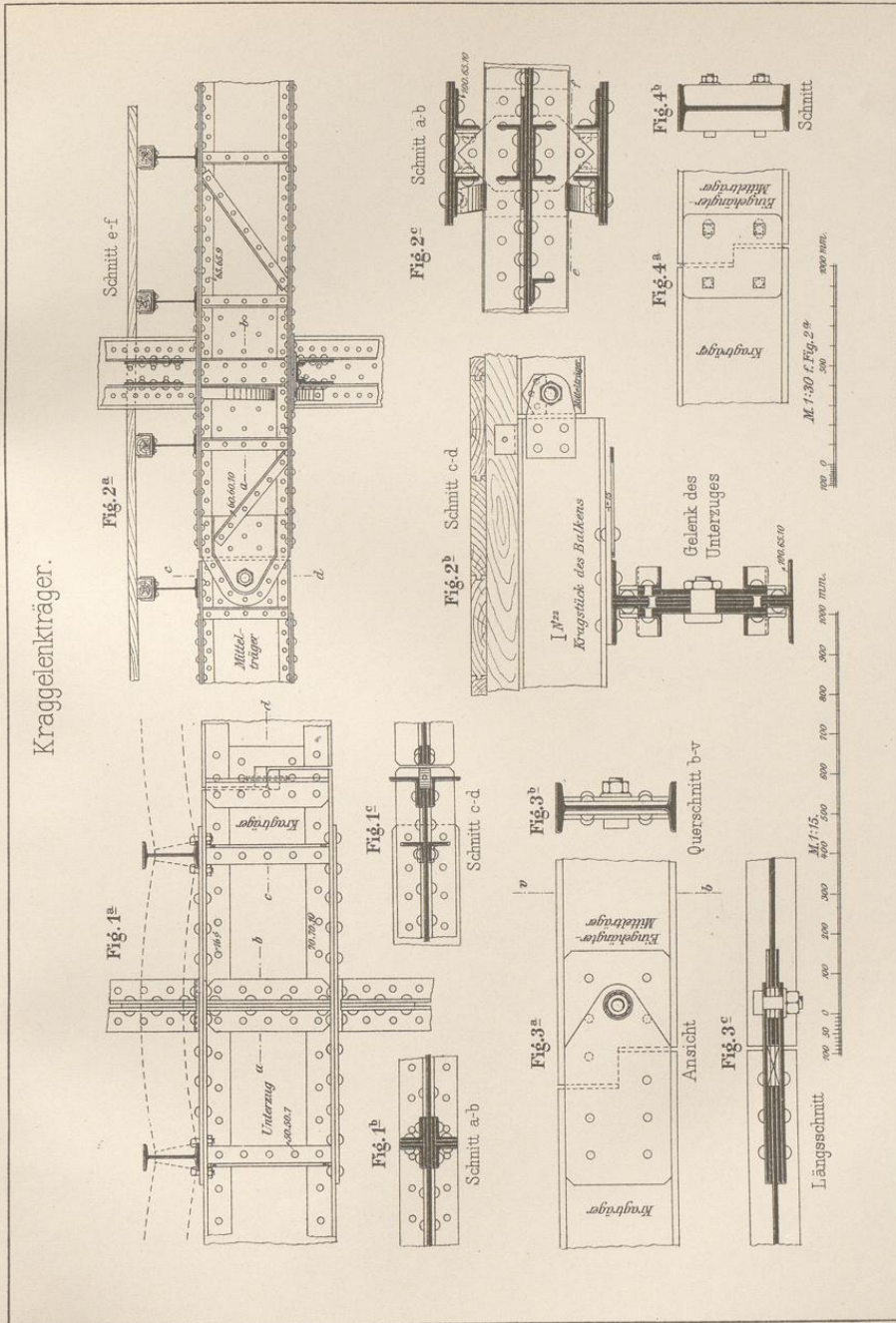


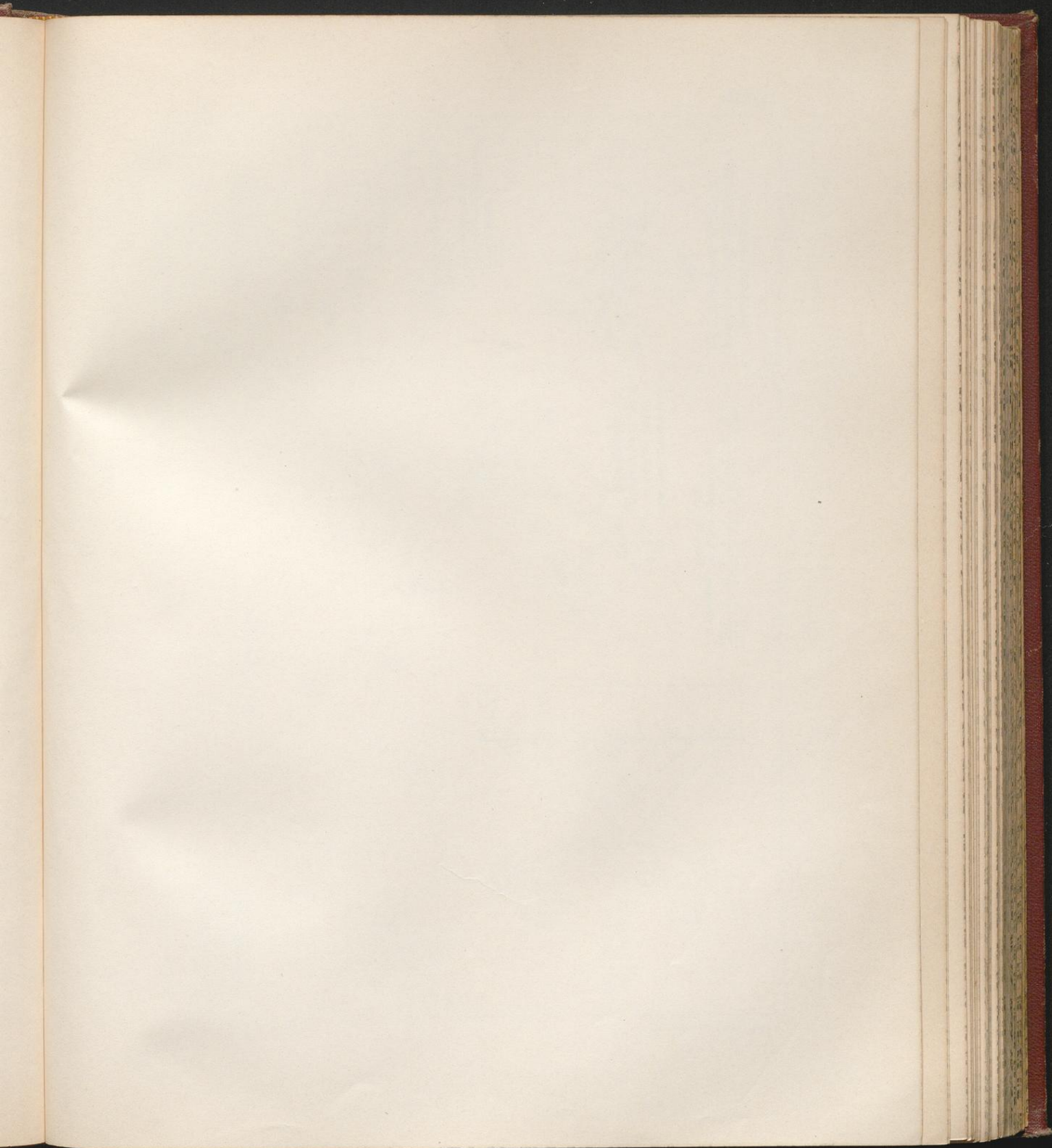
Stofsverbindungen genieteteter Träger.

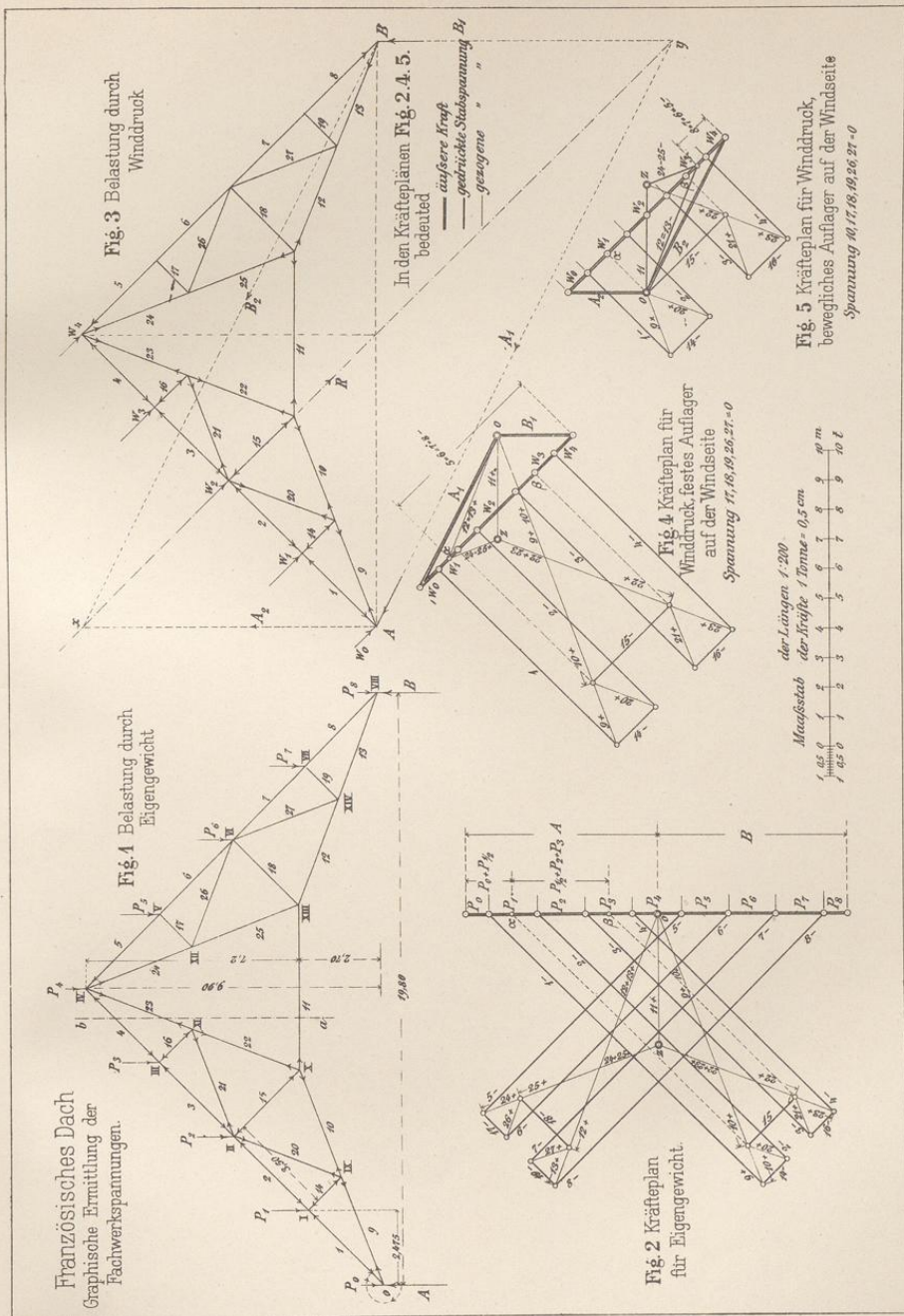




Kragelenkträger.

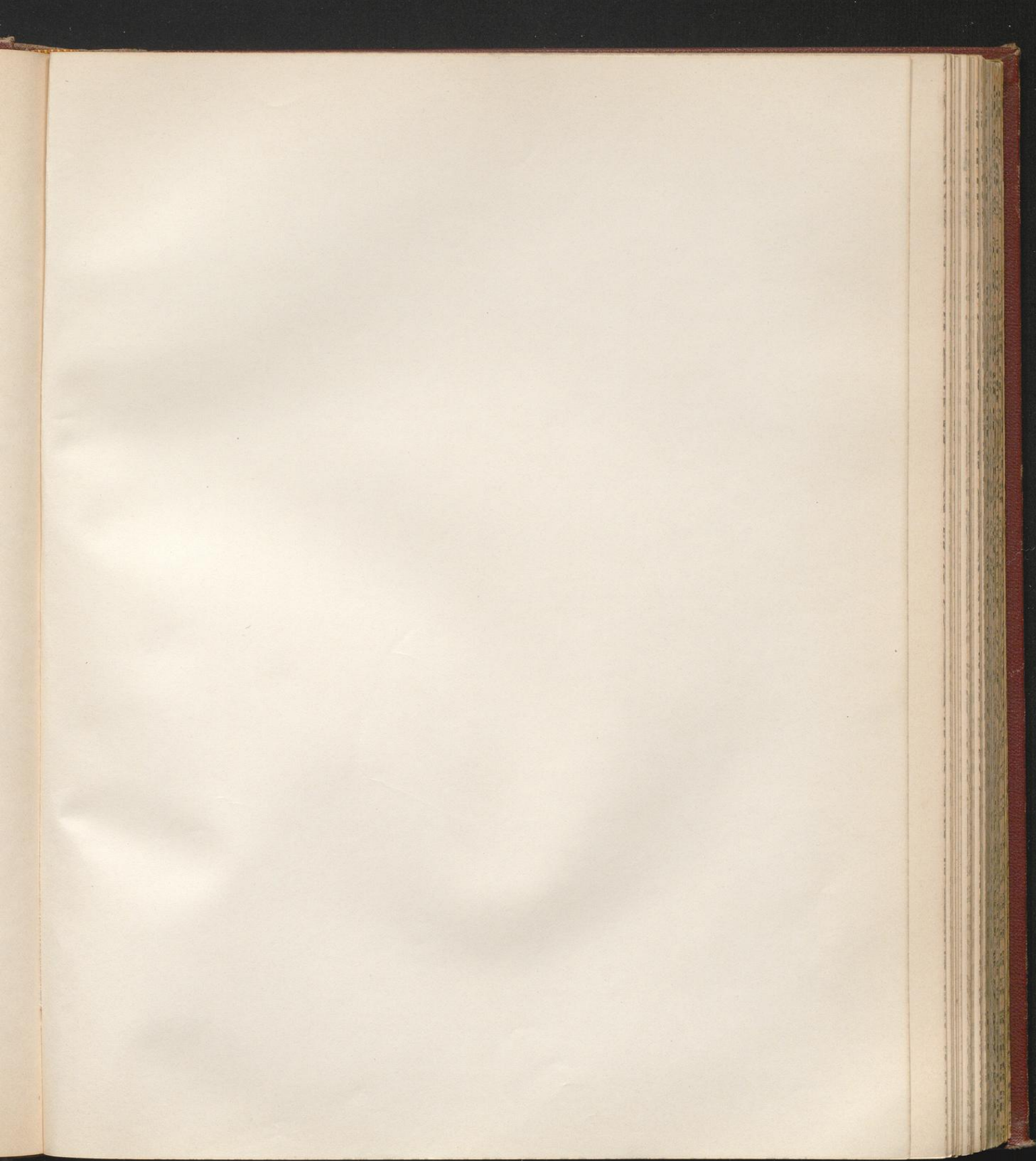


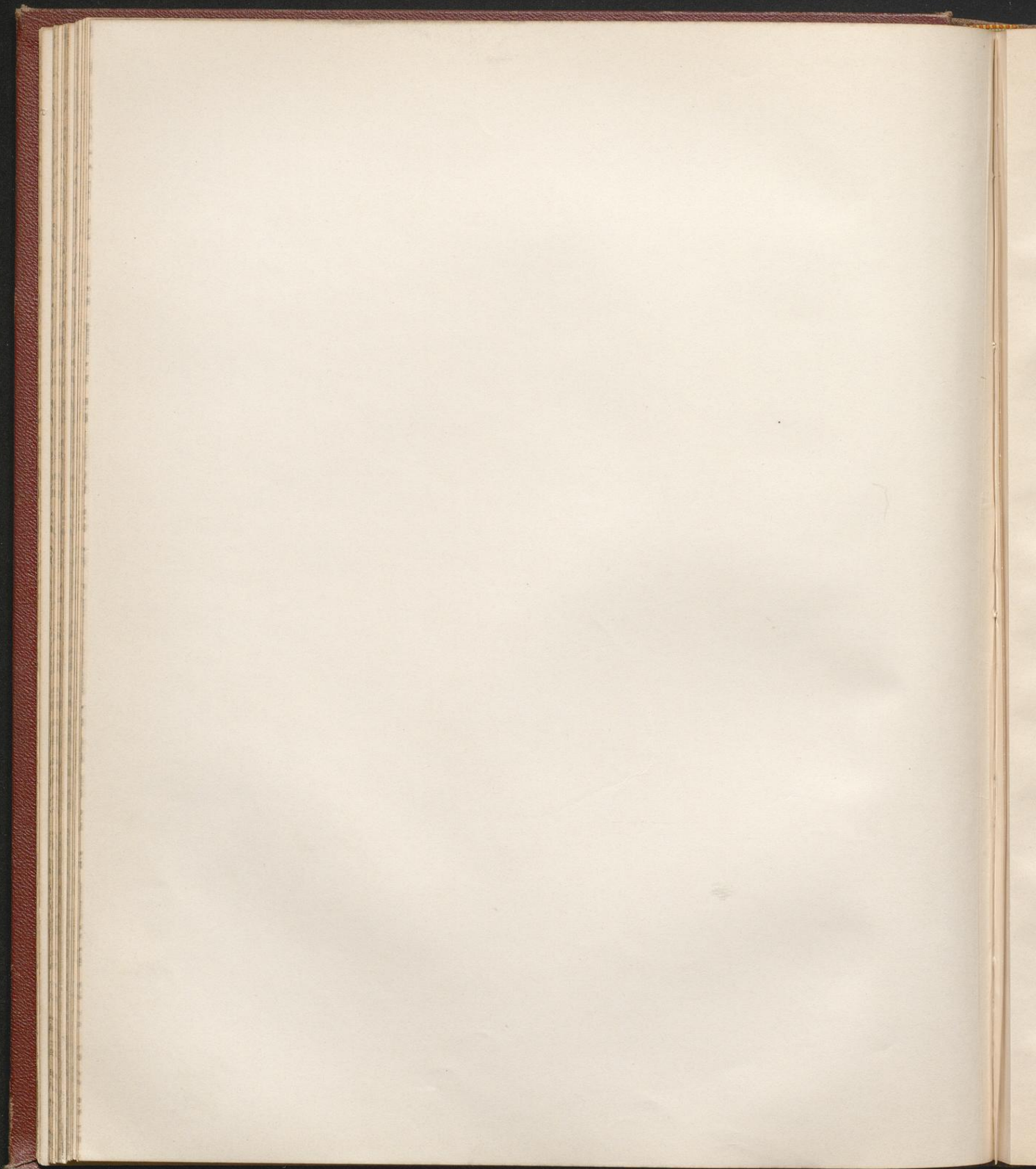


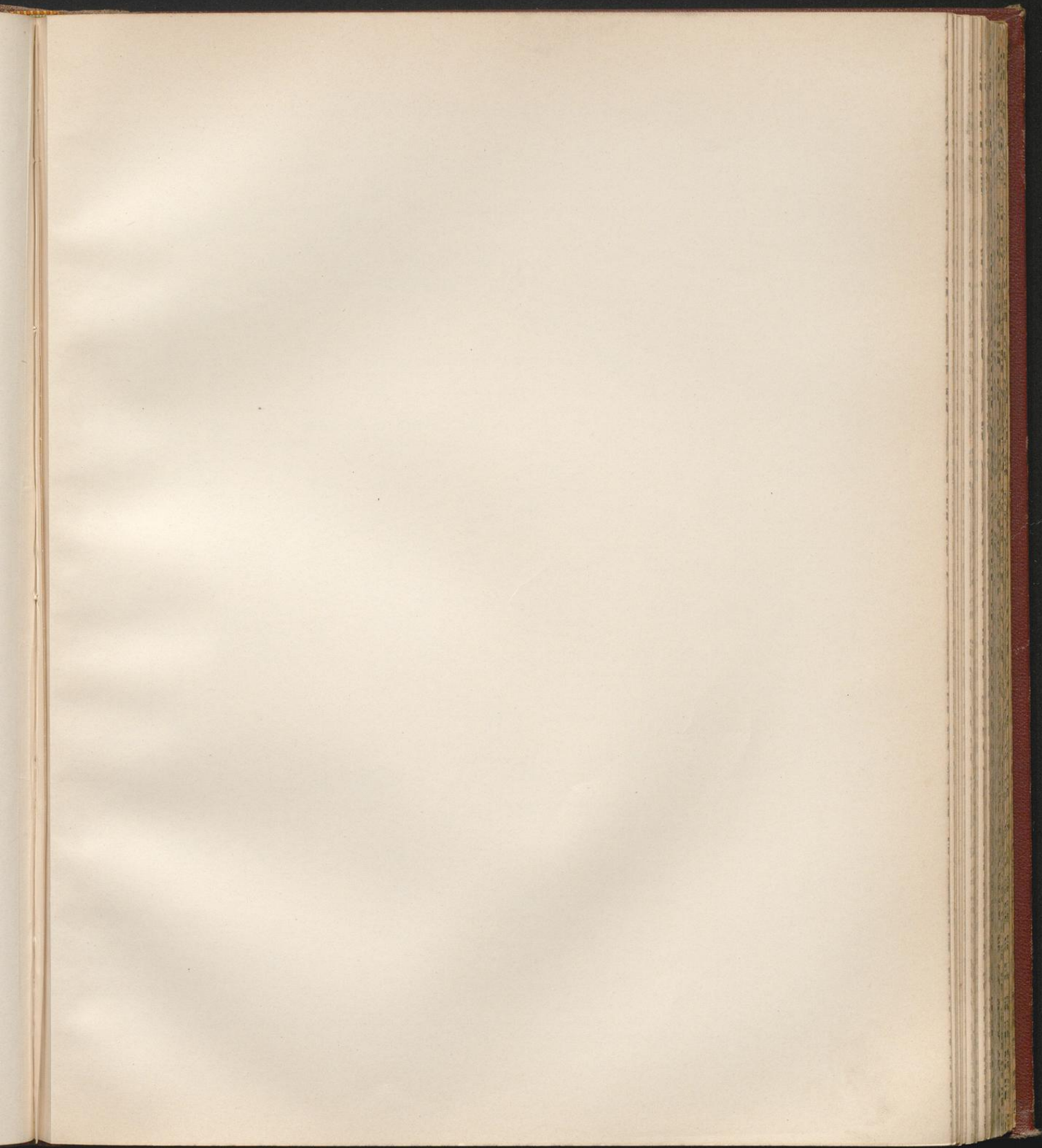


Breymann III Eisen (6. Aufl.)

J.M. Gebhardt's Verlag, Leipzig.







Englisches Dach

Graphische Ermittlung der Fachwerkspannungen im Binde.

Fig. 1^a Belastung durch Eigengewicht

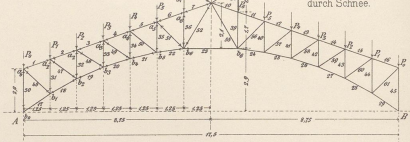


Fig. 1^b Belastung durch Schnee

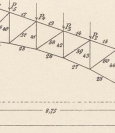


Fig. 3 Kräfteplan für Eigengewicht

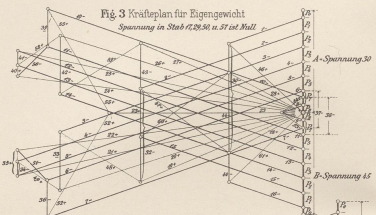


Fig. 4 Kräfteplan für einseitige Schneelast

Spannung f in D ist Null

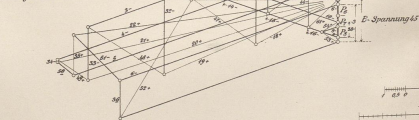


Fig. 2 Belastung durch Wind

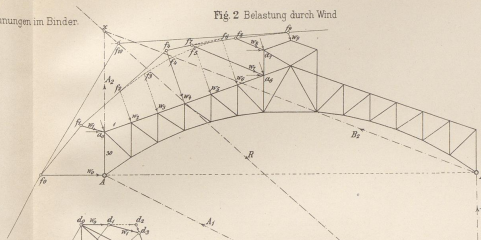


Fig. 4 Kräfteplan zur Ermittlung der Auflagerdrücke bei Windbelastung

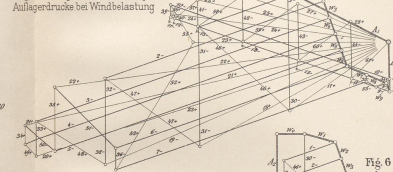


Fig. 5 Kräfteplan bei Windbelastung und festem Auflager auf der Windseite

Spannung in Stab $A-B$ in Stab D ist Null

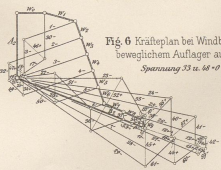
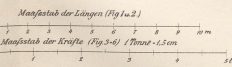
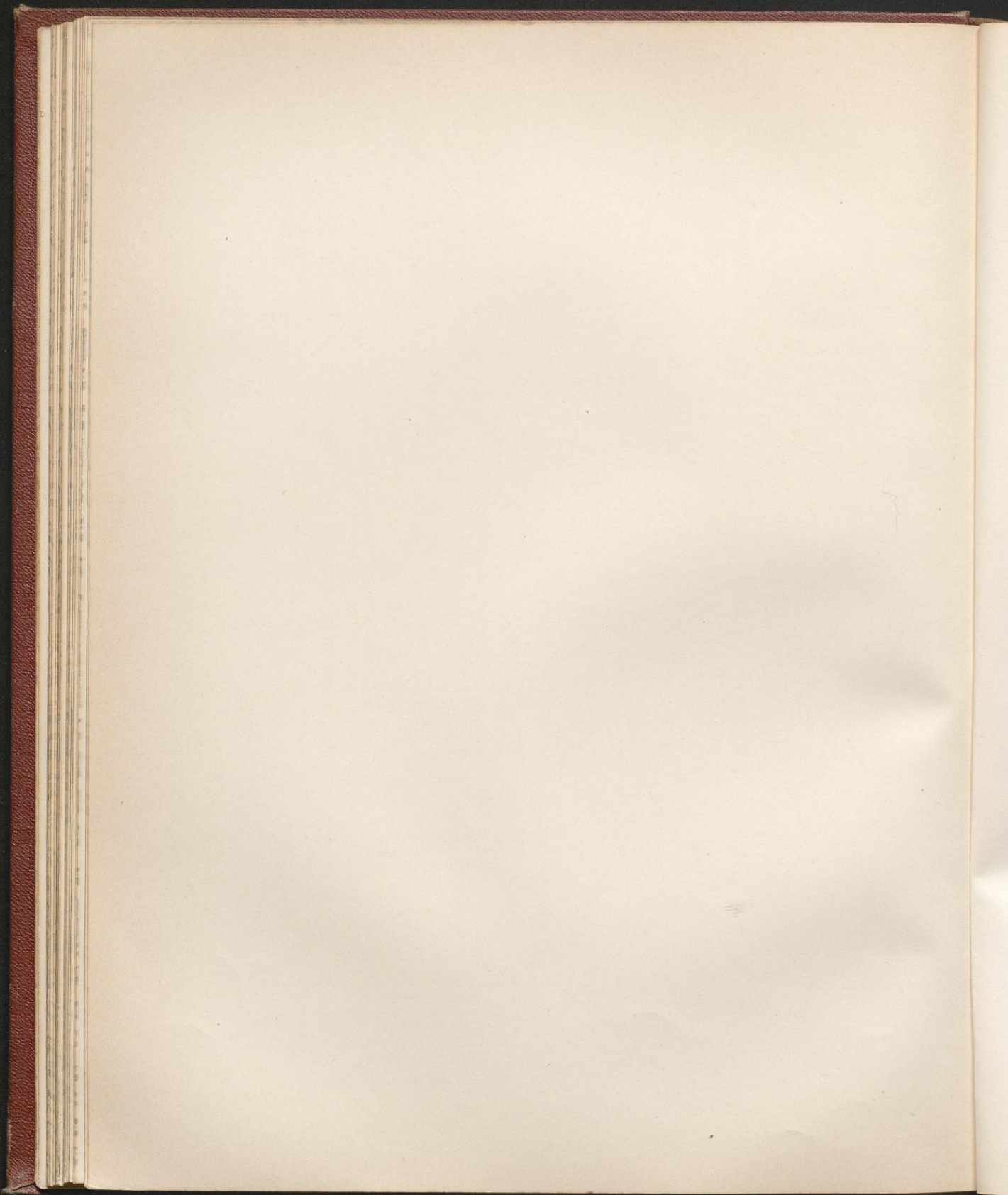
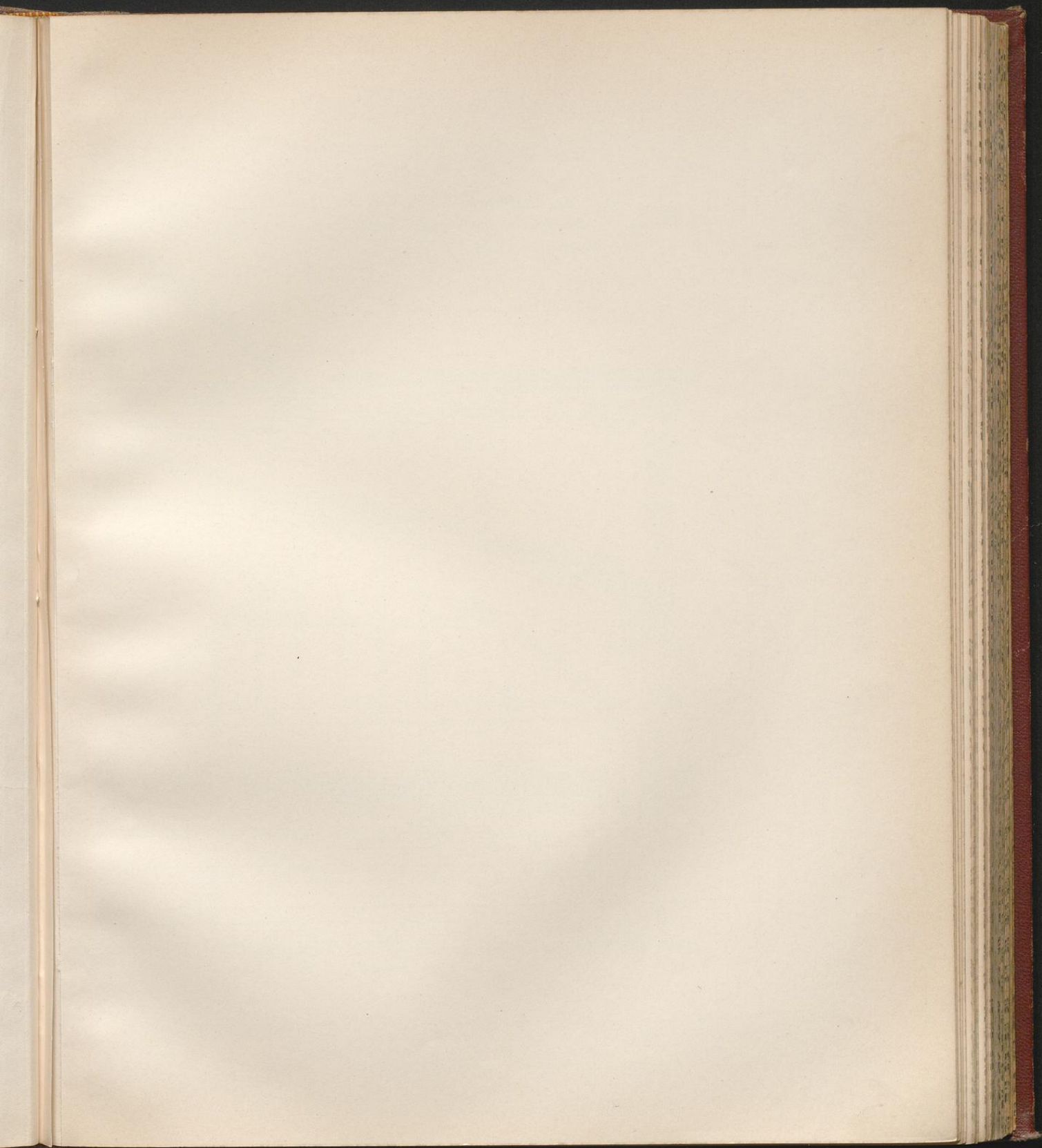


Fig. 6 Kräfteplan bei Windbelastung und beweglichem Auflager auf der Windseite

Spannung 33 in $A-B$







Anordnung
der Decke und des Daches über einem Oberlichtsaale.
(Entwurf) Blatt 1.

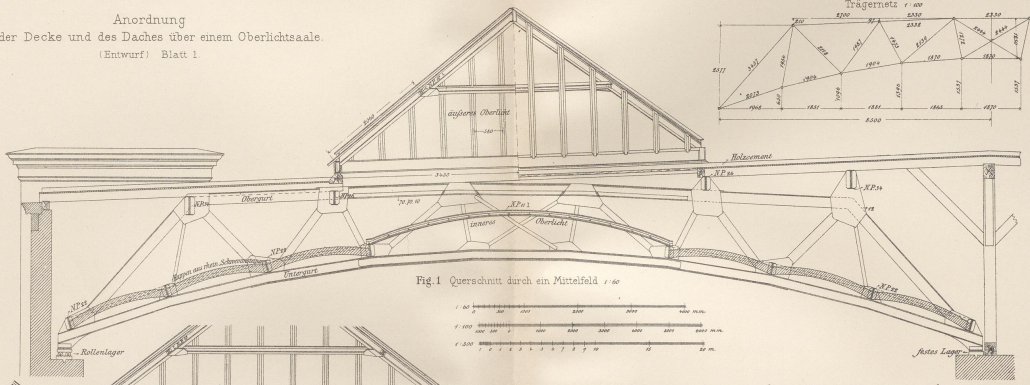


Fig. 1 Querschnitt durch ein Mittelfeld 1:60

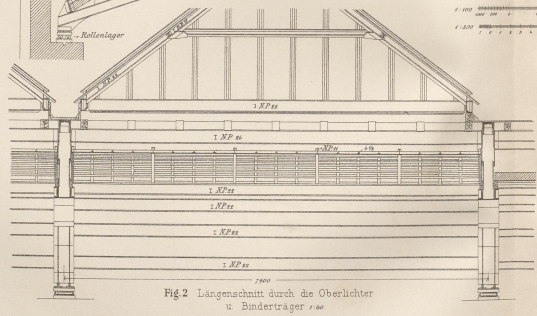


Fig. 2 Längenschnitt durch die Oberlichter u. Buntträger 1:60

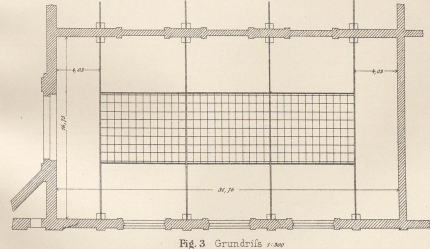
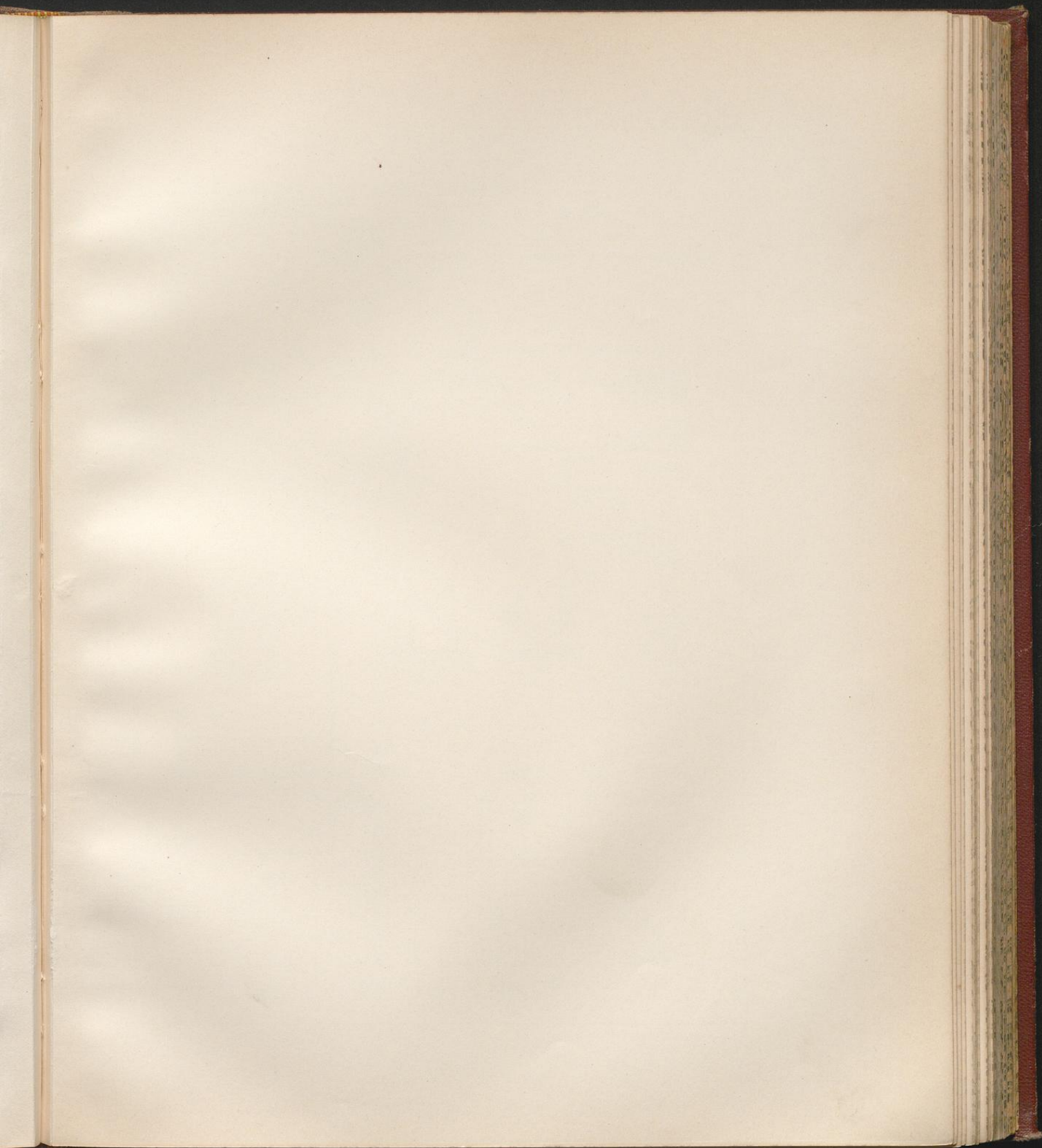
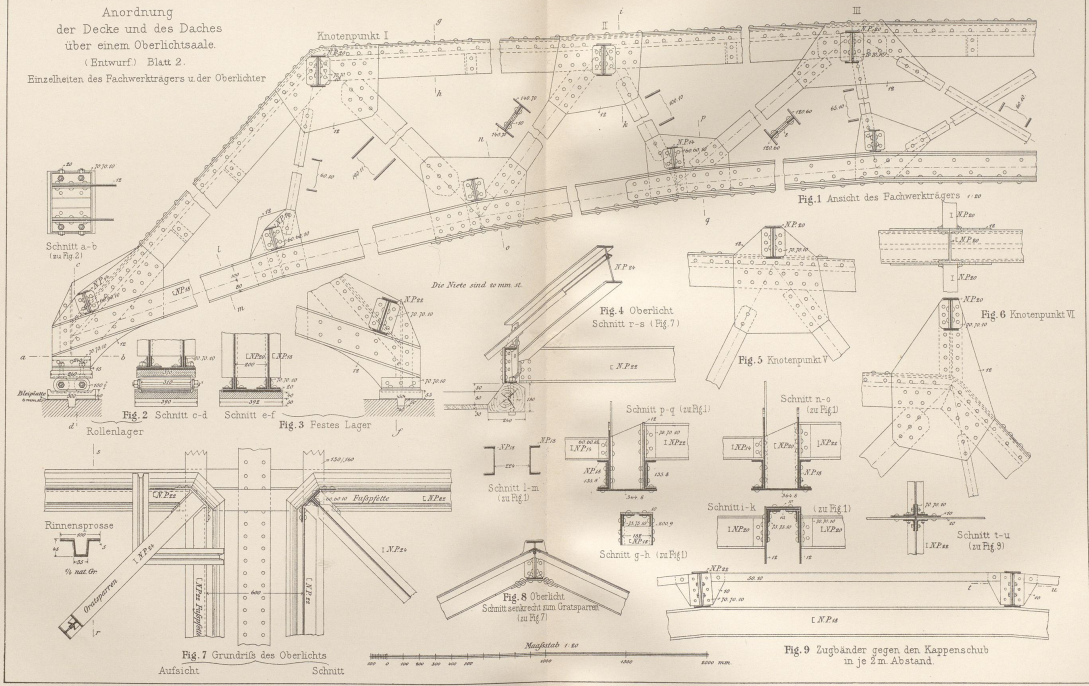


Fig. 3 Grundriß 1:200

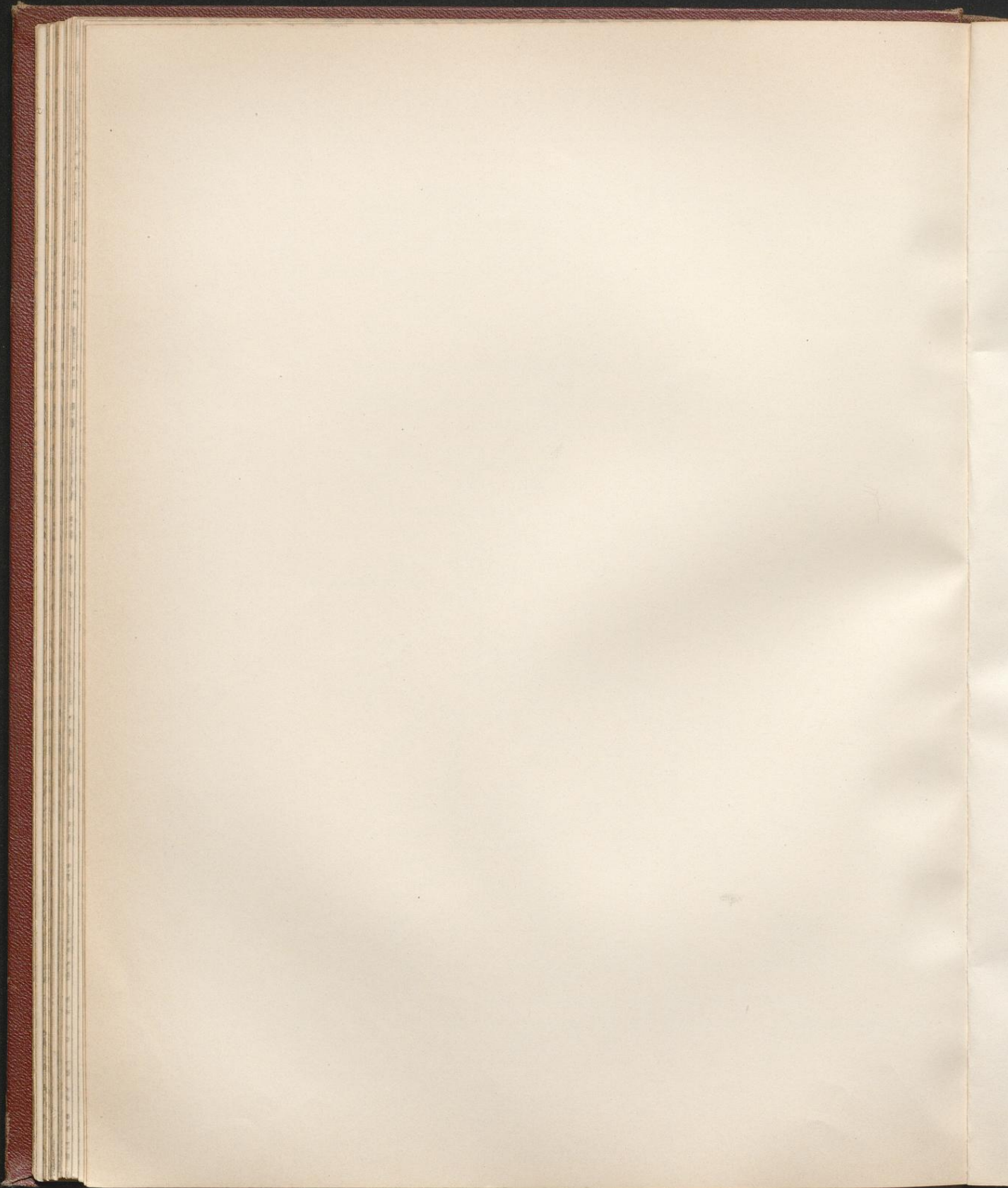


Anordnung der Decke und des Daches über einem Oberlichtsaale.
(Entwurf) Blatt 2
Einzelheiten des Fachwerkträgers u der Oberlichter



Beymann II Eisen (6. Aufl.)

J.M. Gebhardt's Verlag, Leipzig.



Decke
über dem großen Sitzungssaale
des Reichsgerichtsgebäudes in Leipzig
(Entwurf)

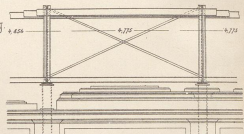
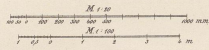


Fig. 1 Längenschnitt

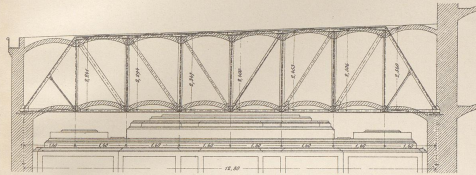


Fig. 2 Querschnitt

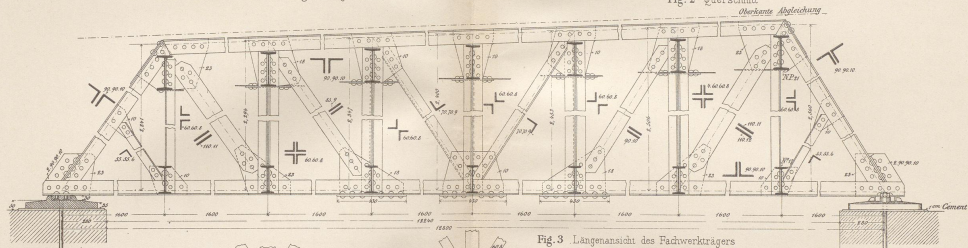


Fig. 3 Längensicht des Fachwerkträgers

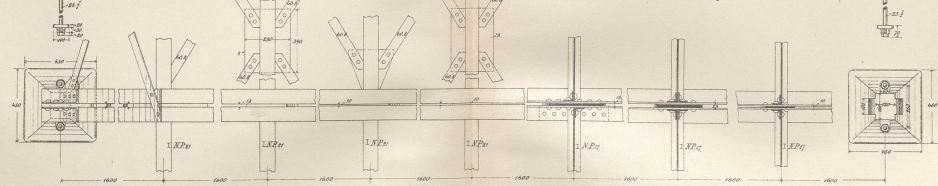


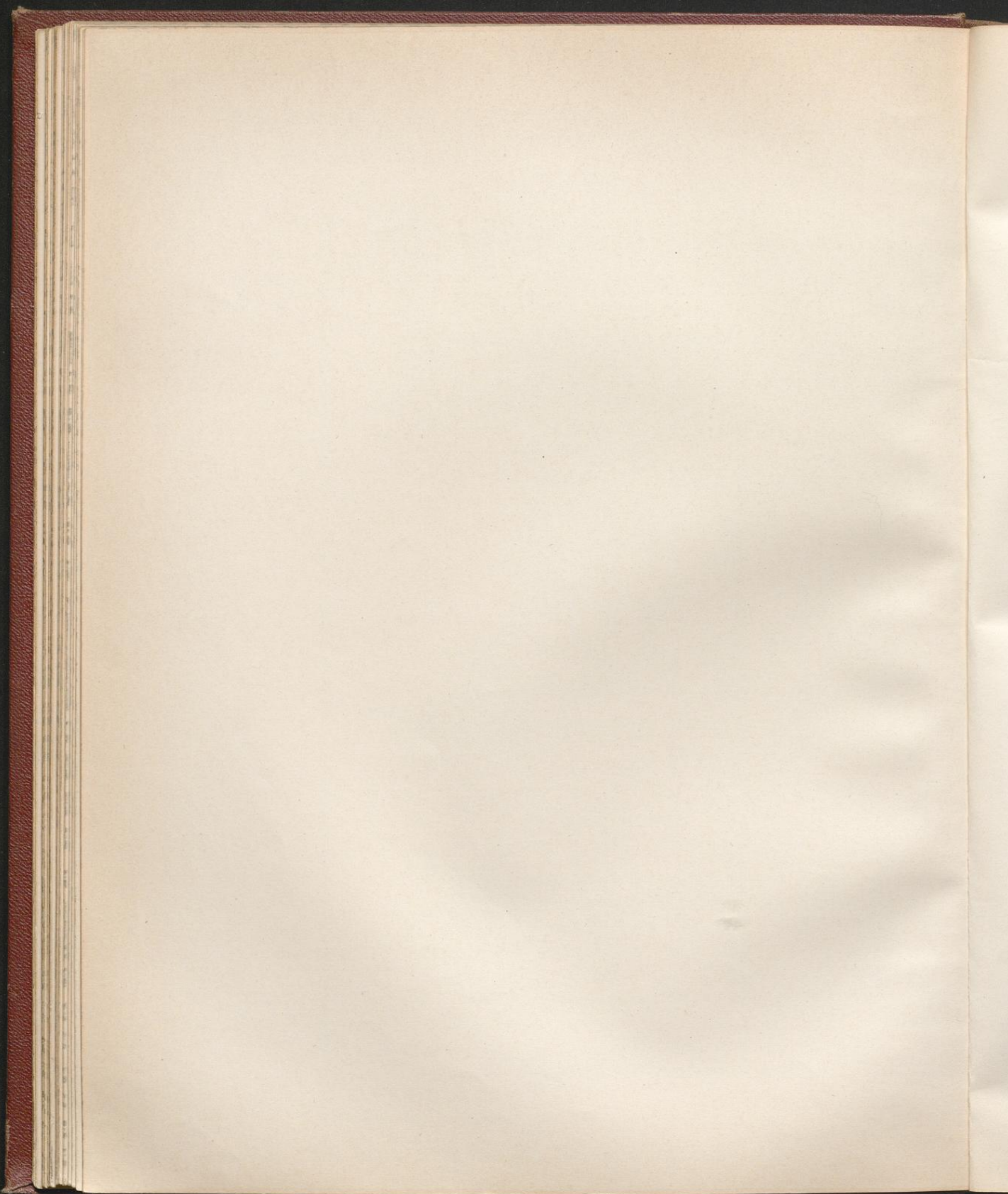
Fig. 4 Grundriss des Fachwerkträgers.

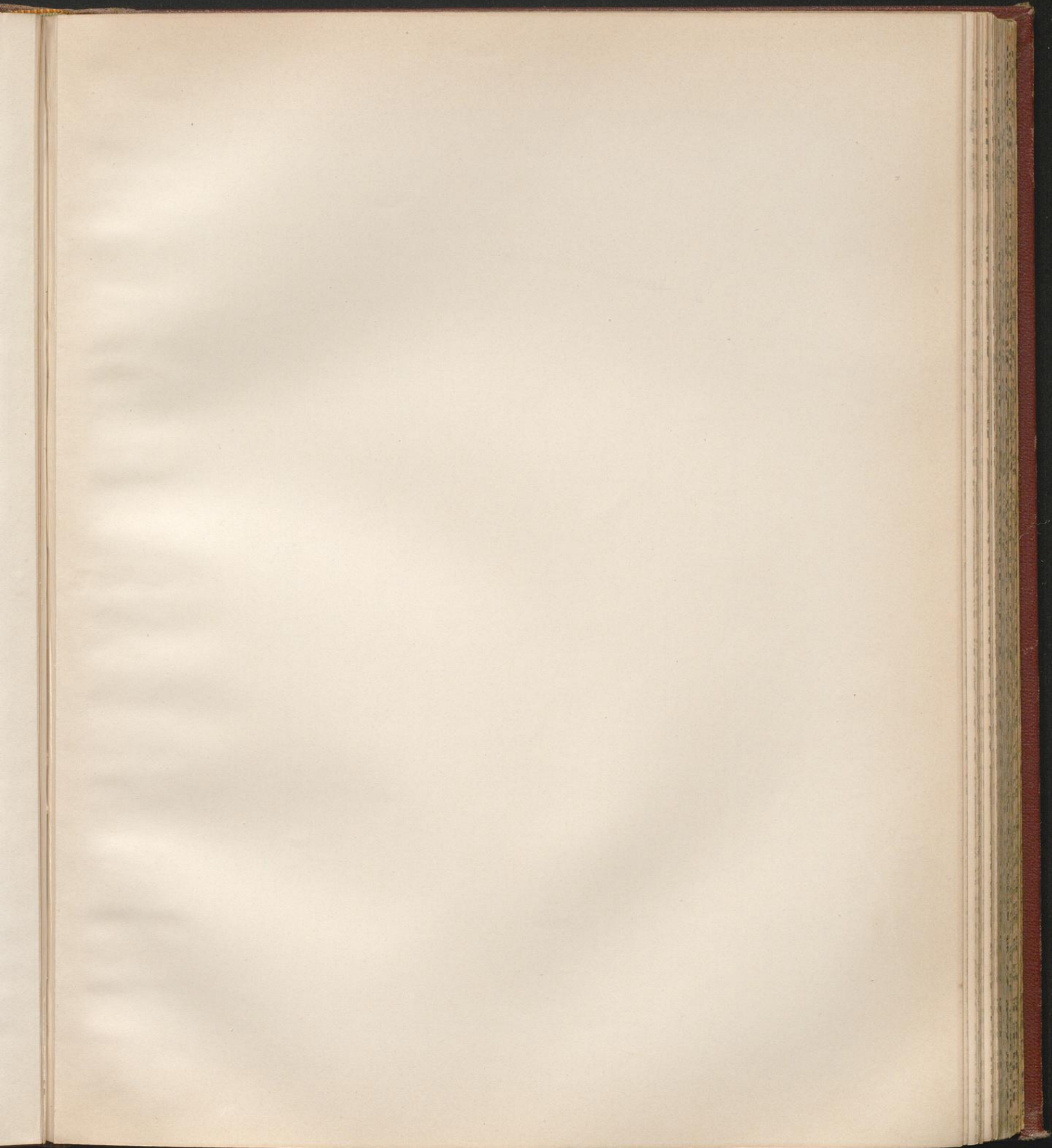
R. Cremer, Ing.

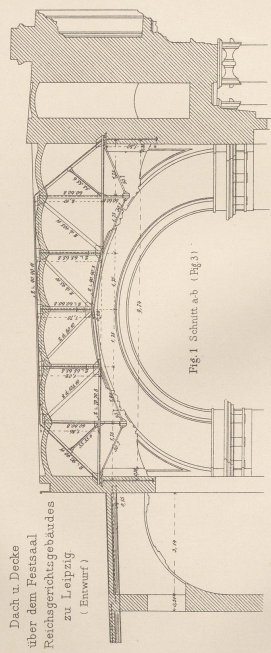
L. Hoffmann, Arch.

Brymann II Eisen. (6. Aufl.)

J.M. Gebhardt's Verlag, Leipzig.







Dach u. Decke über dem Festsaal des Reichsrichtungsgebäudes zu Leipzig (Enwürf)

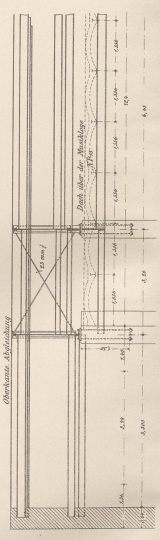


Fig. 2 Schnitt c-d (Fig. 3)

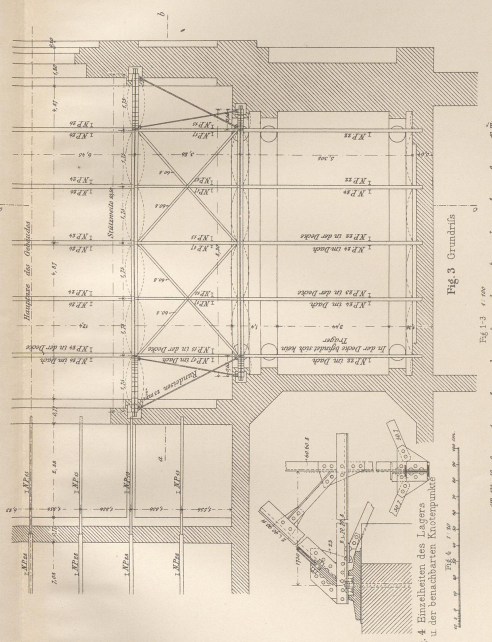


Fig. 3 Grundriß

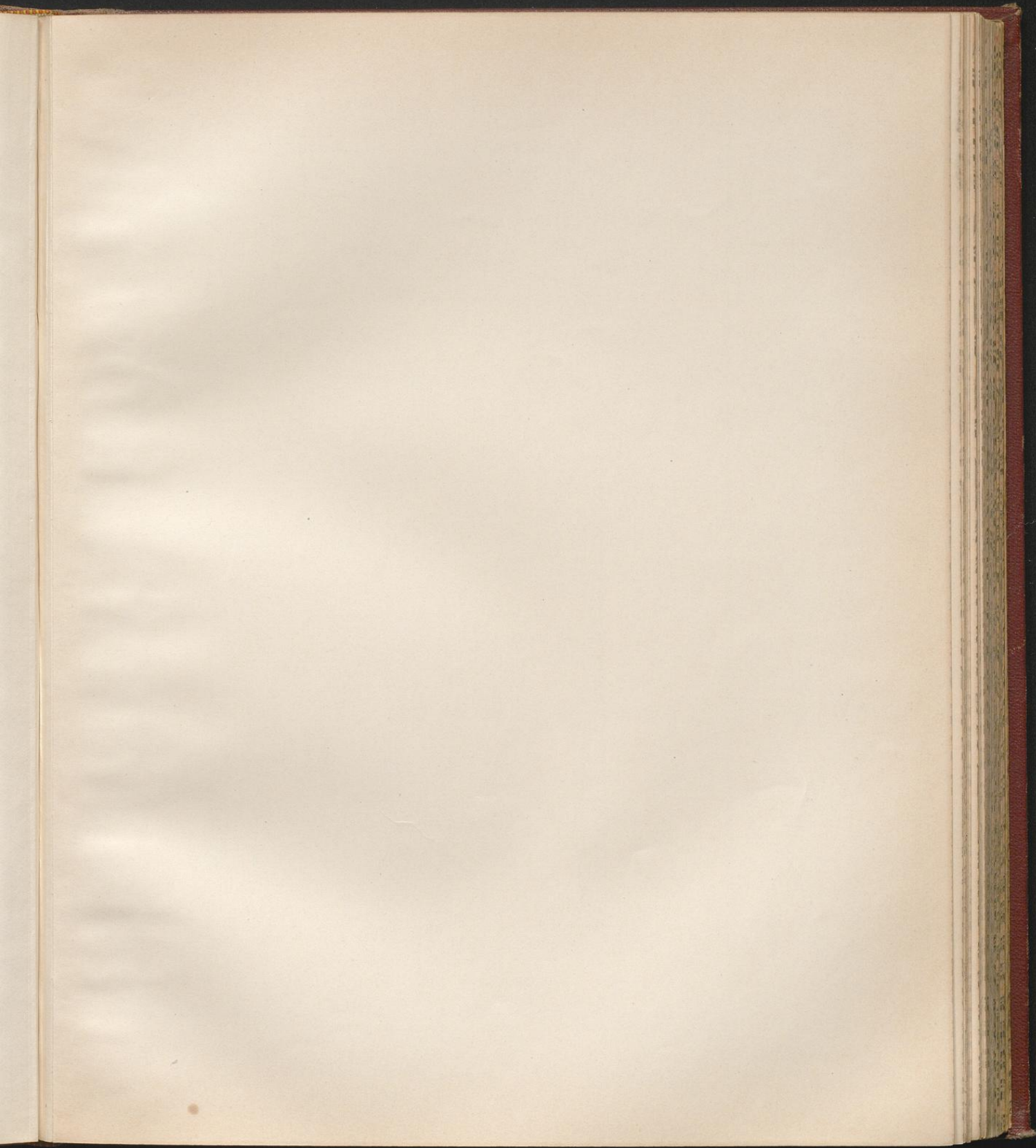
Fig. 1-3 r. 000

Fig. 4 Einzelheiten des Laagers u. der benachbarten Knotenpunkte

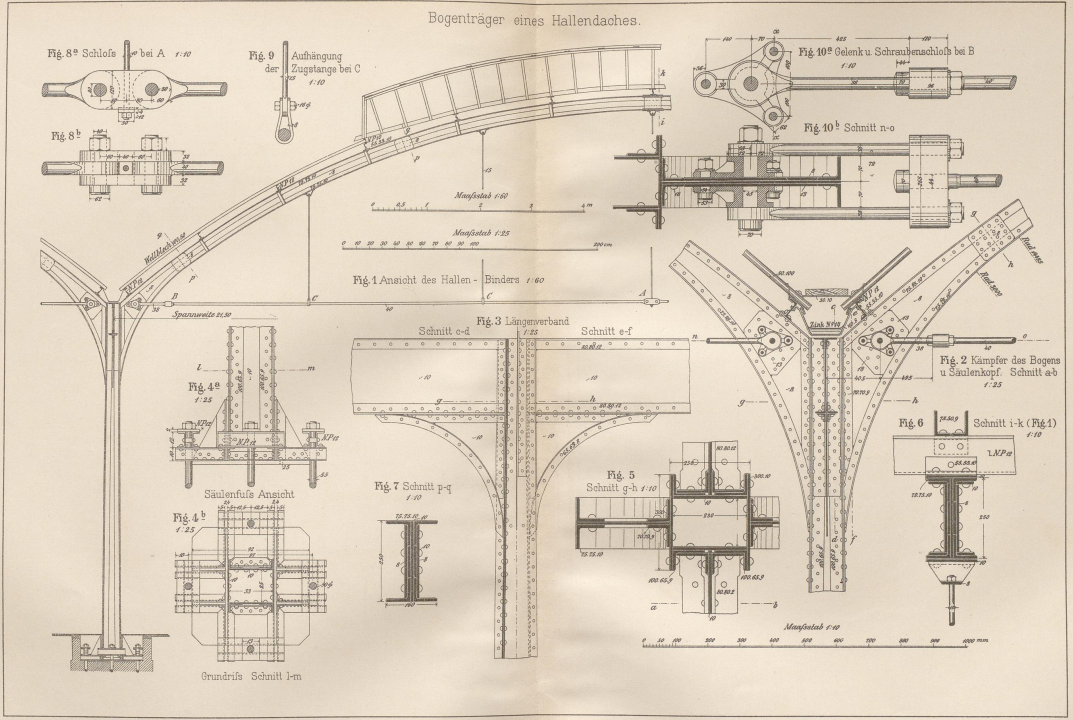
R. Cremer, Ing.

J.M. Gebhardt's Verlag, Leipzig.

Leipzig, Hoffmann, Nach.



Bogenträger eines Hallendaches.



Graphische Ermittlung der Spannungen im Bogenträger.

Fig. 1^a Seilpolygone bei senkrecht wirkenden Lasten.

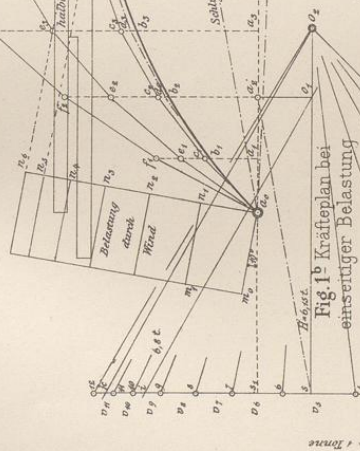


Fig. 1^b Kräfteplan bei einseitiger Belastung

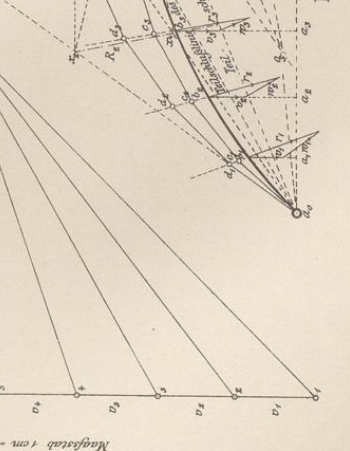


Fig. 1^c Kräfteplan bei völler Belastung.

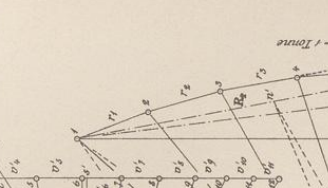


Fig. 2^a Kräfteplan bei einseitiger Belastung

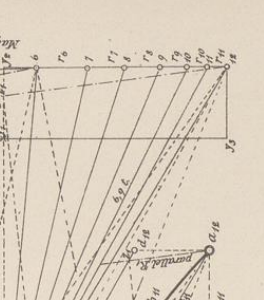


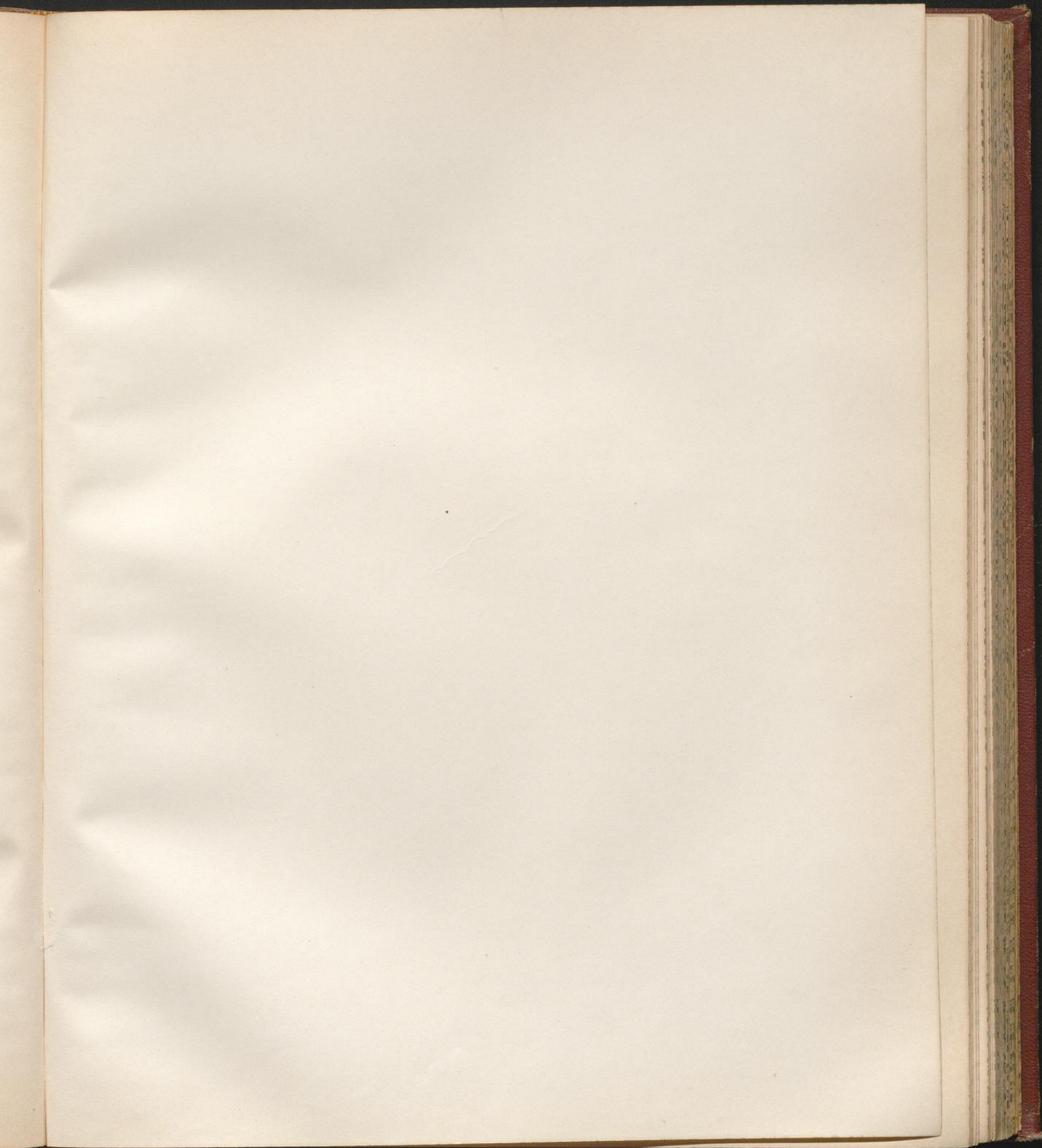
Fig. 2^b Seilpolygone bei schief wirkenden Lasten.

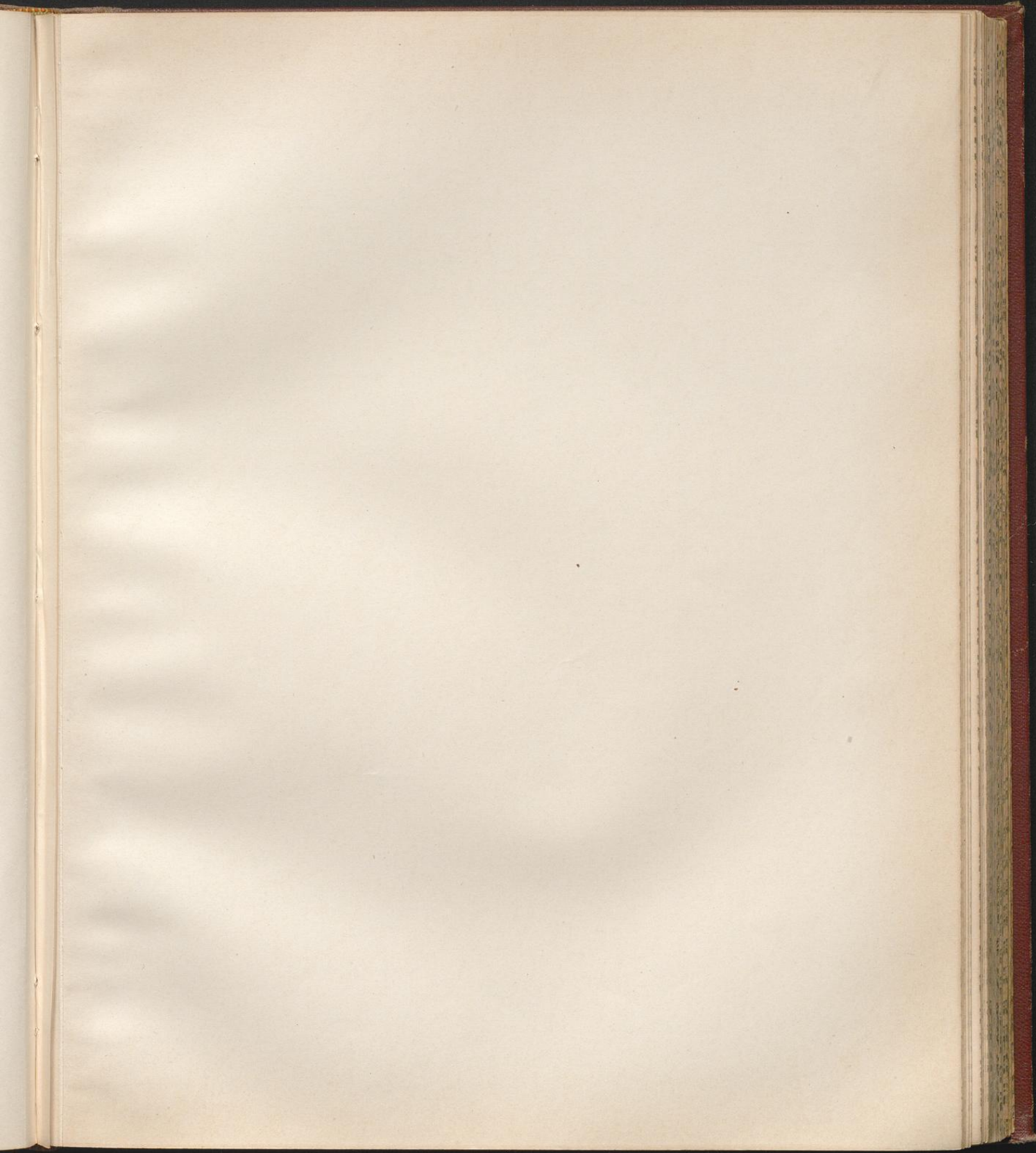


Maßstab 1 cm = 1 Tonne

Maßstab der Längen 1:100

1 2 3 4 5 m.





Graphische Ermittlung der Spannungen im Bogenträgerwerk.

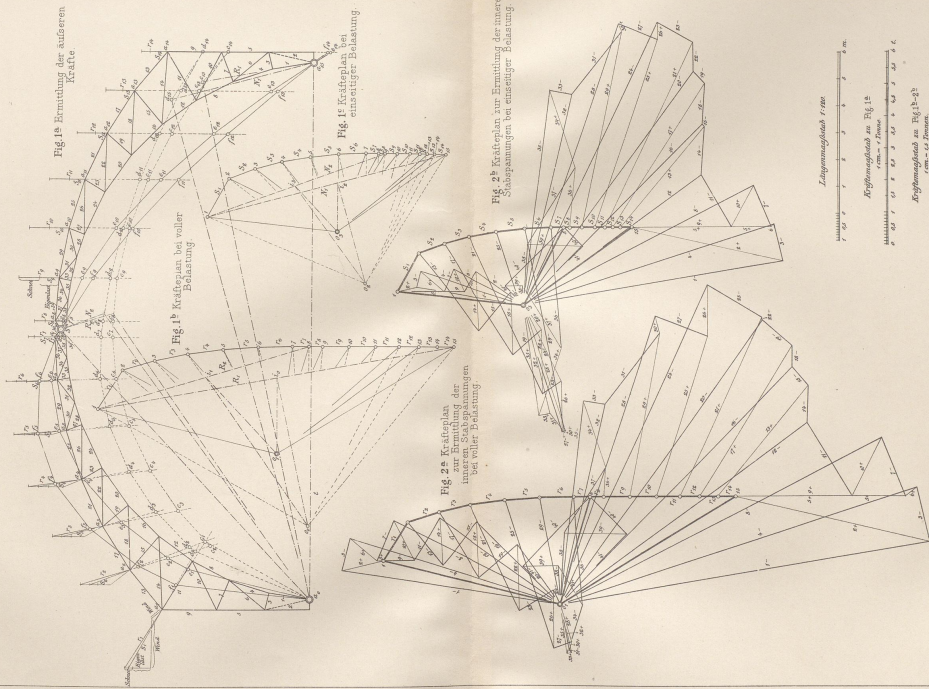
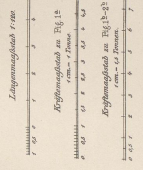


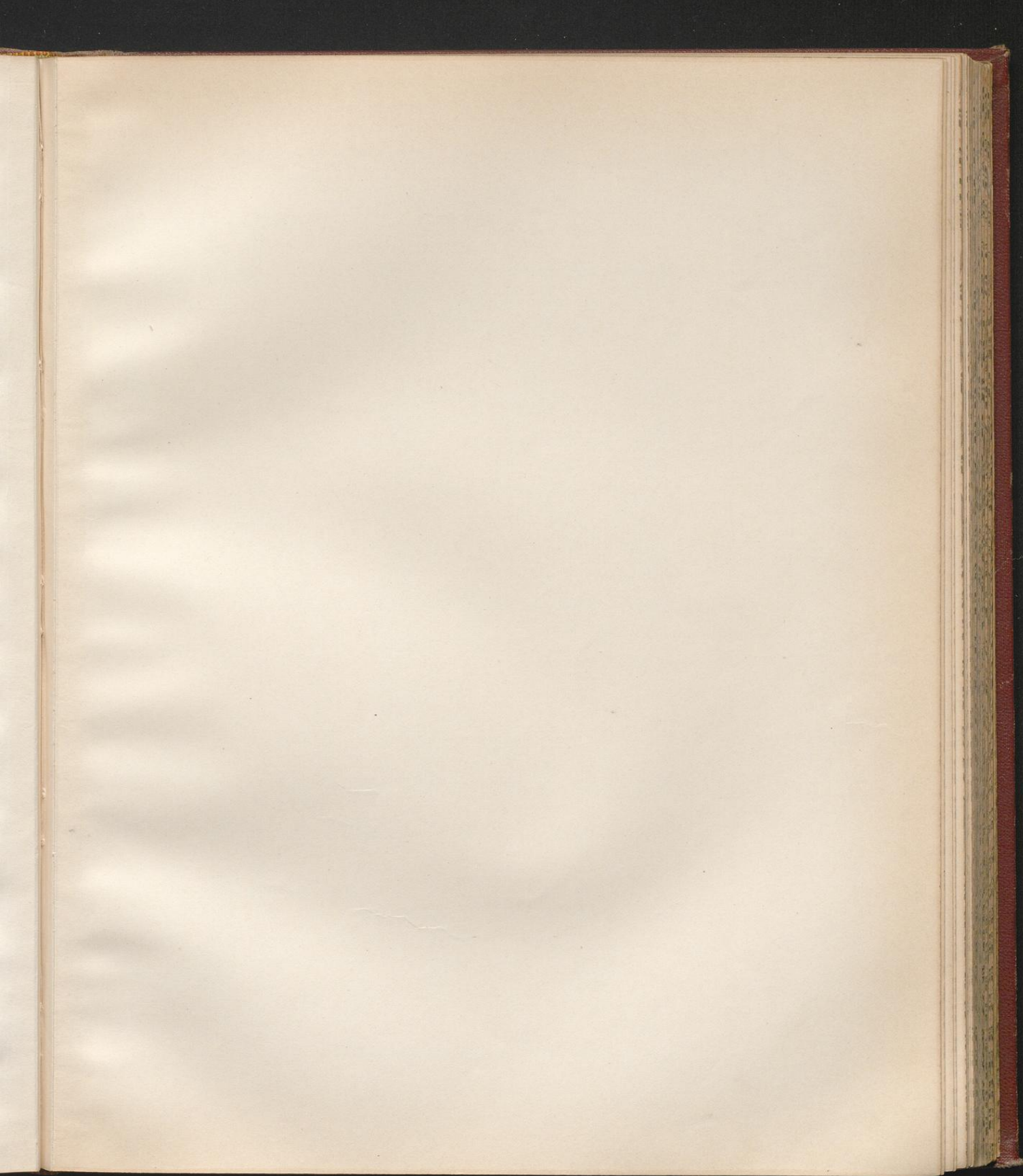
Fig. 1a Ermittlung der äußeren Kräfte.

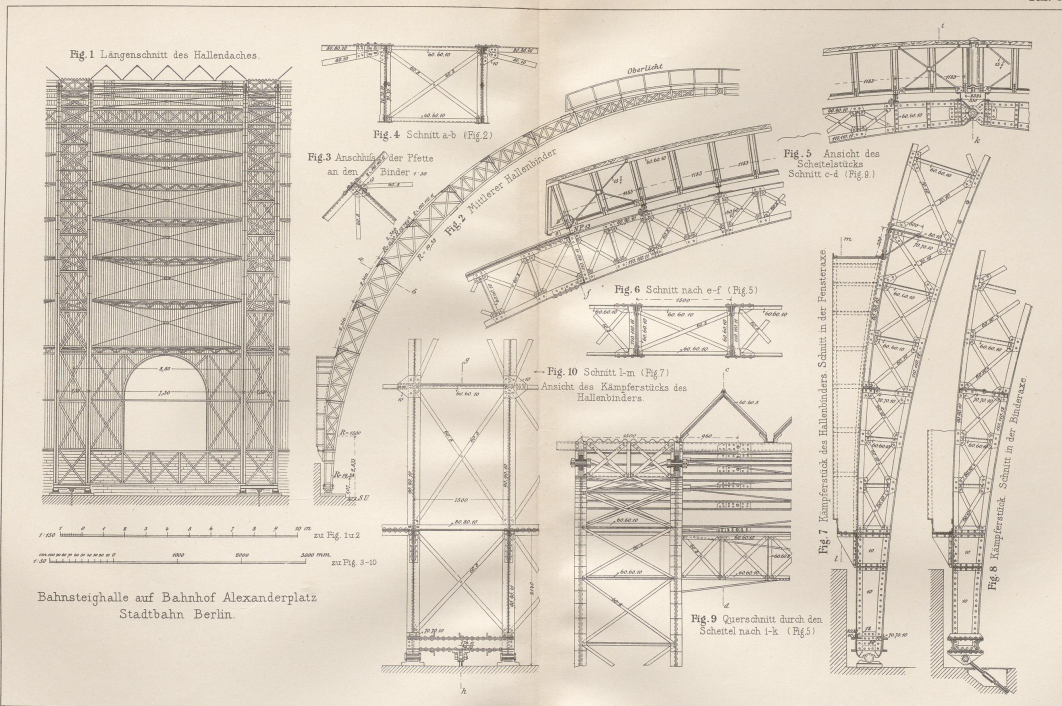
Fig. 1^b Kräfteplan bei voller Belastung.

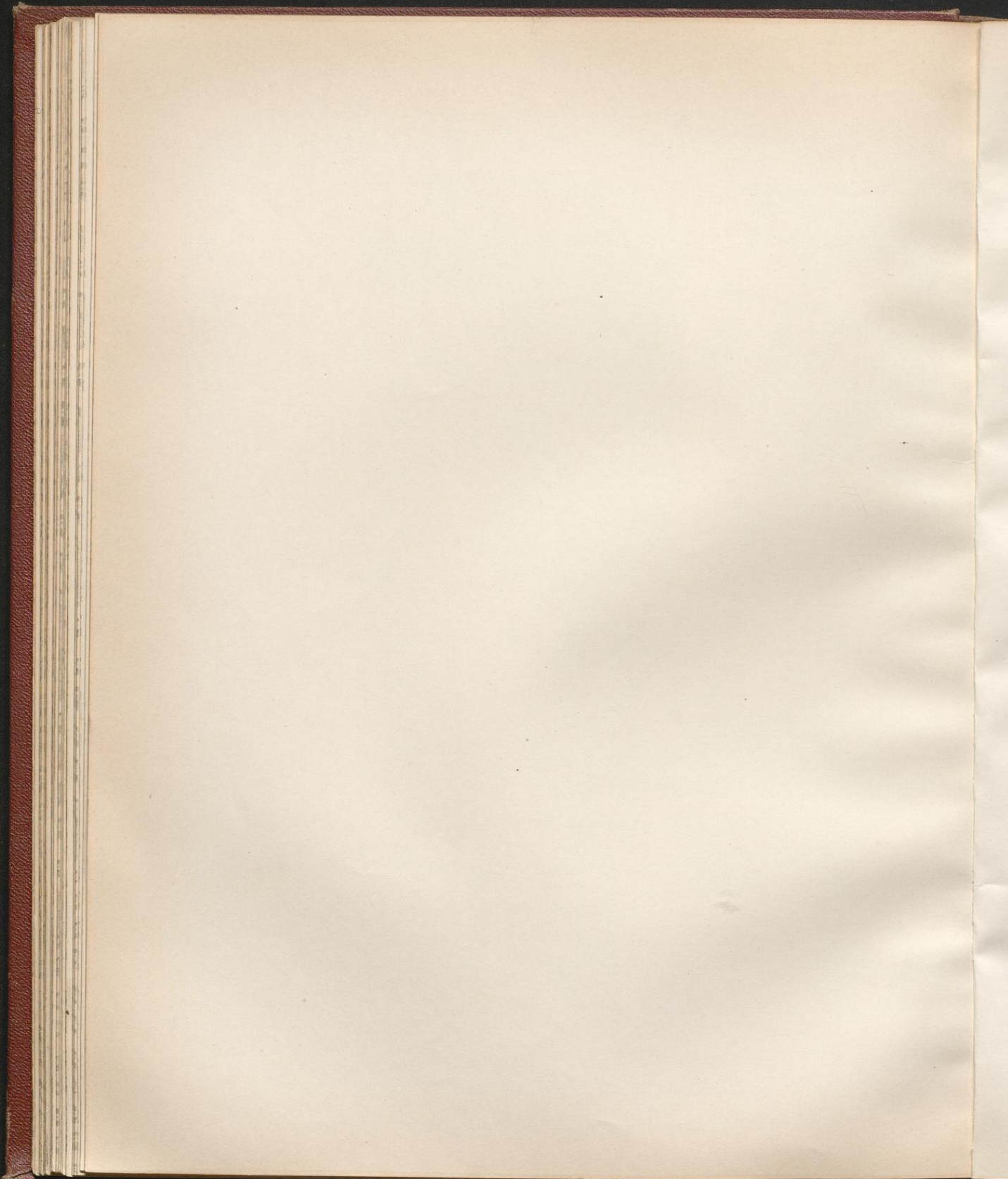
Fig. 2^a Kräfteplan zur Ermittlung der inneren Spannungen bei einseitiger Belastung.

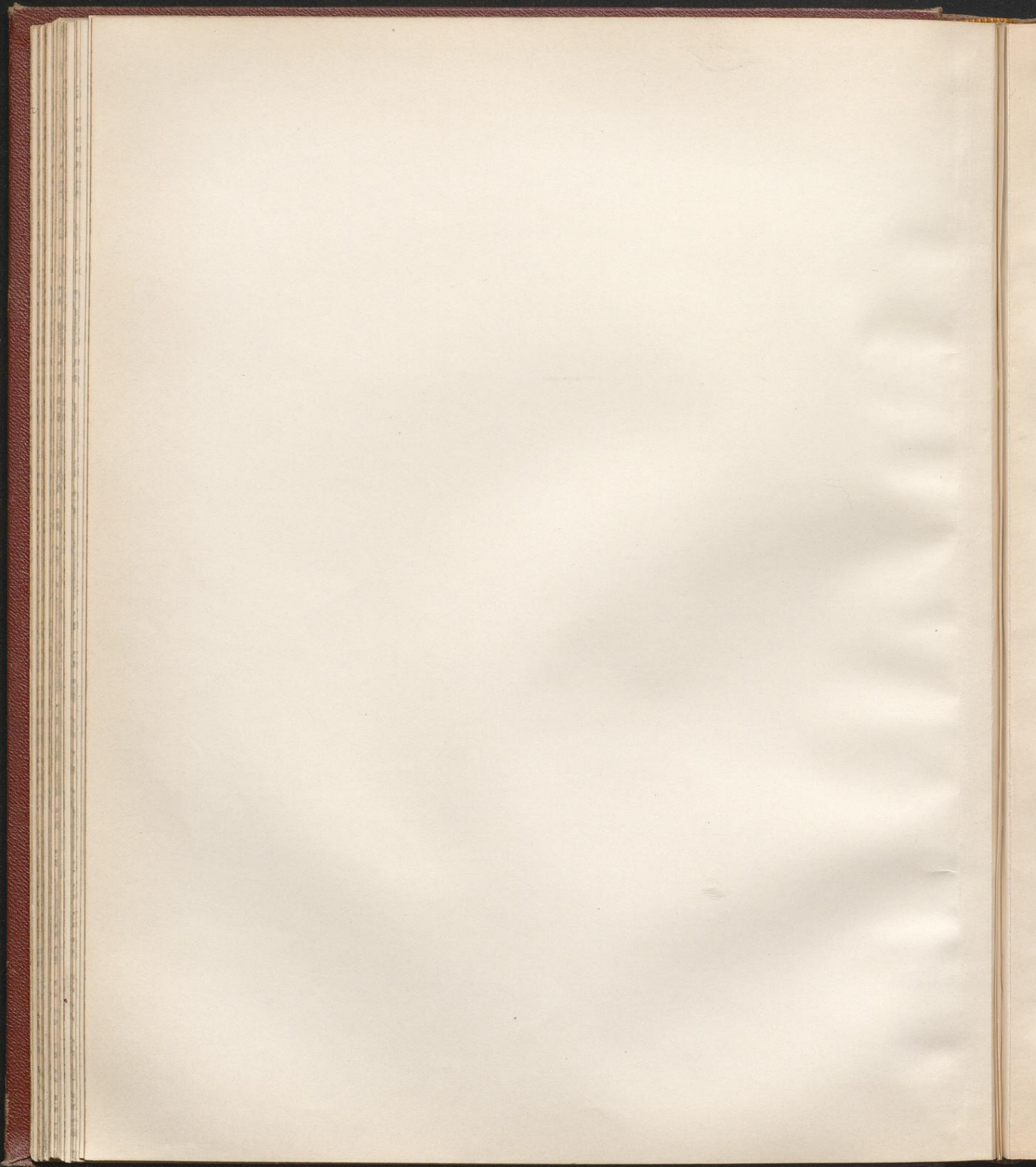
Fig. 2^b Kräfteplan zur Ermittlung der inneren Spannungen bei einseitiger Belastung.

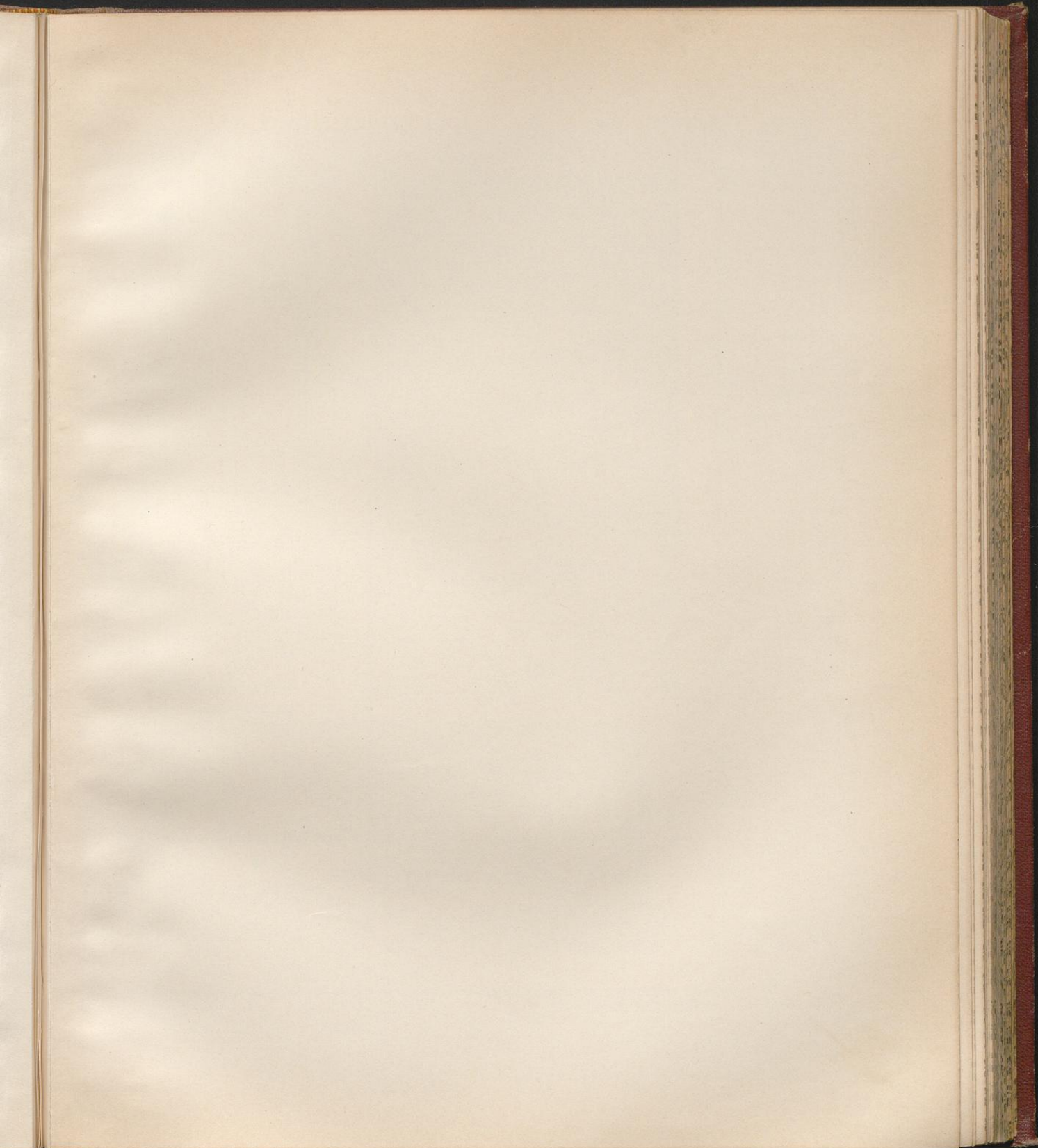




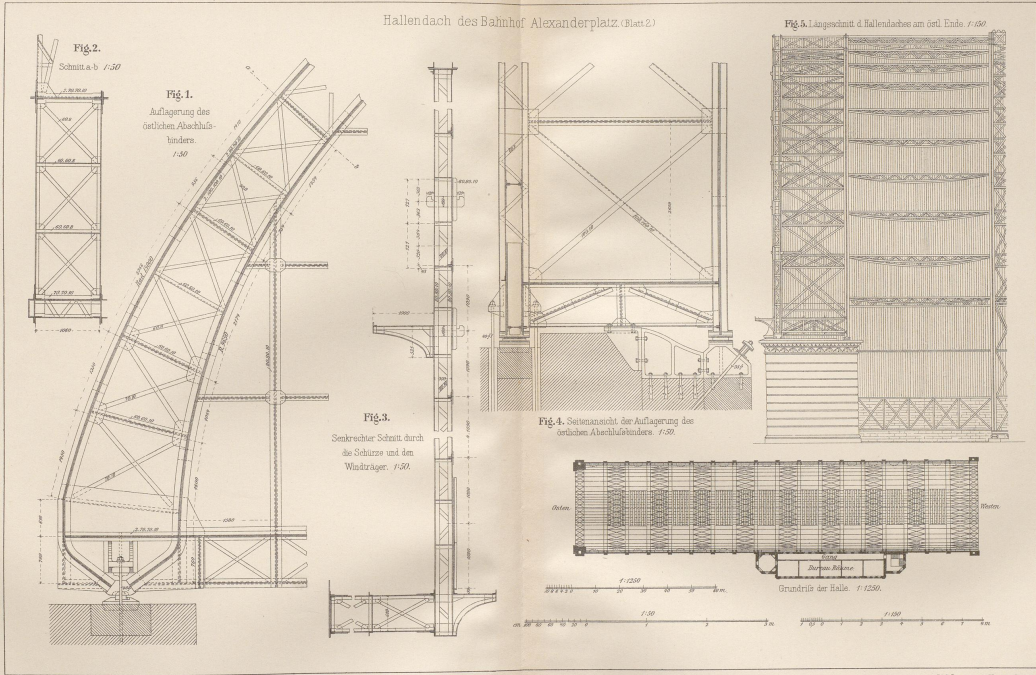






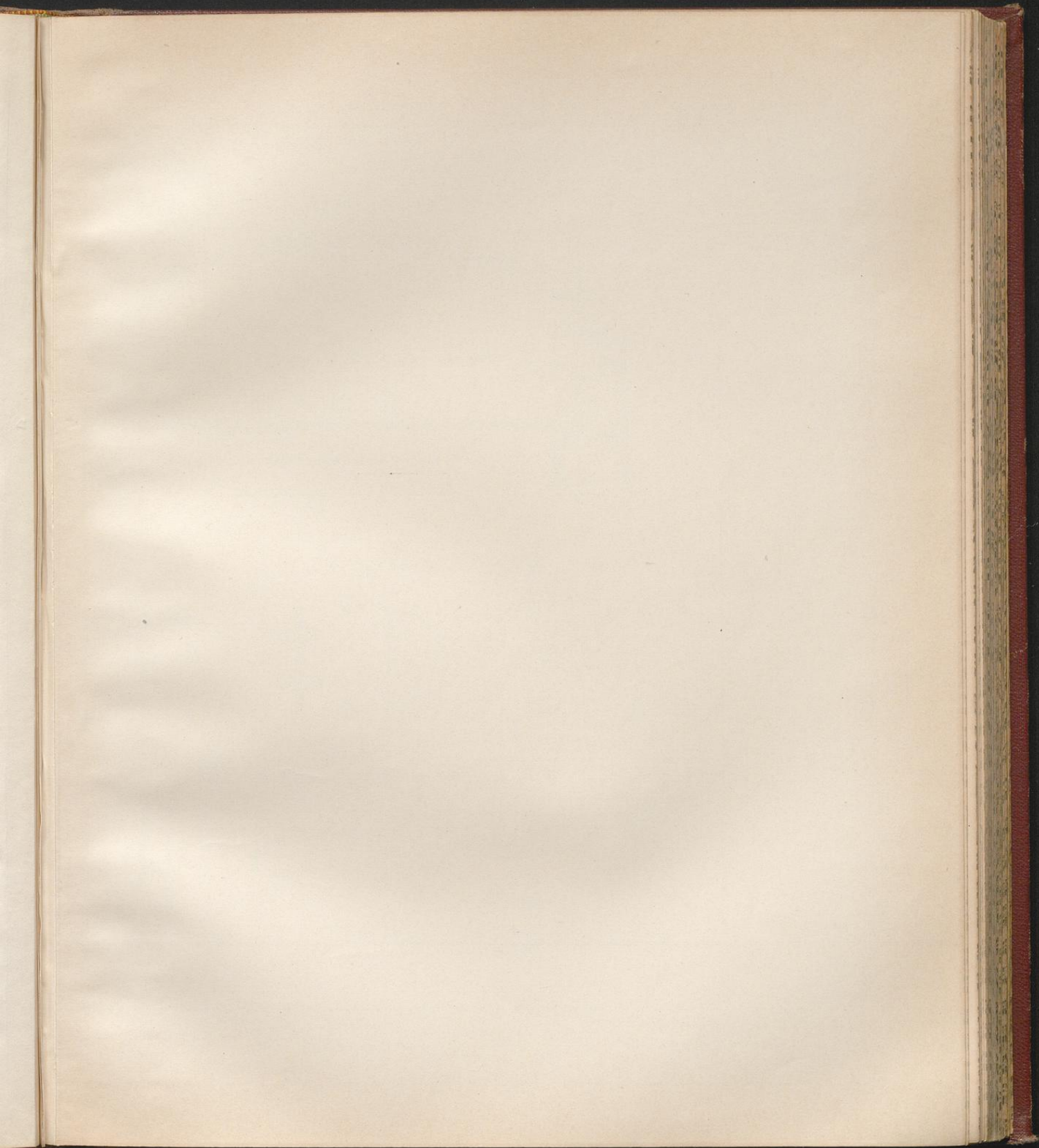


Hallendach des Bahnhof Alexanderplatz. (Blatt 2.)

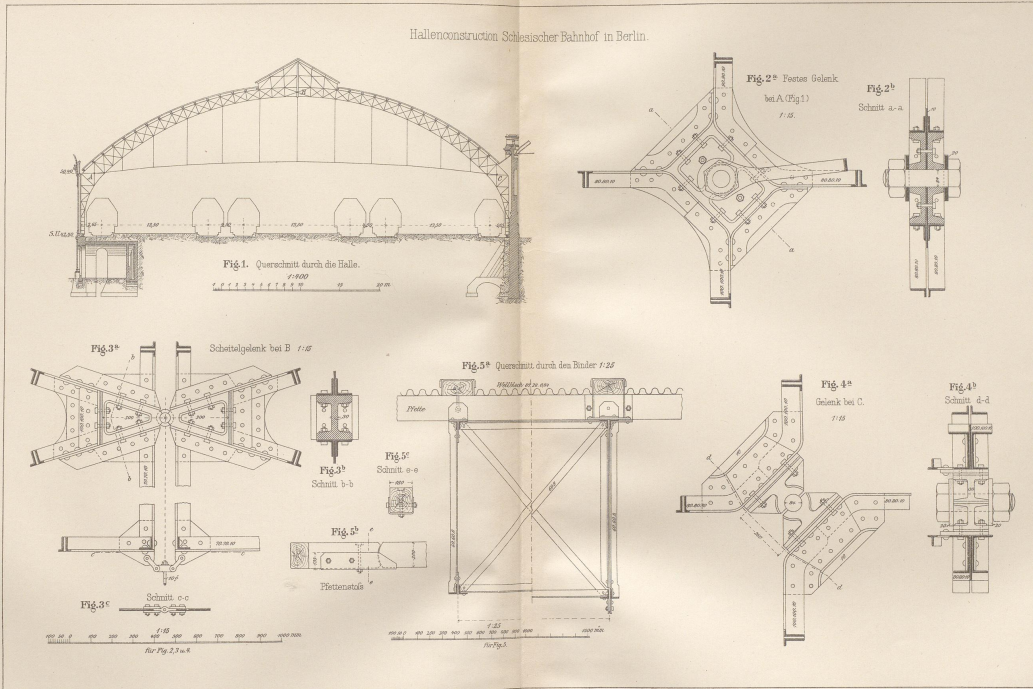


Bregmann II Eisen. 16. Aufl.

J.M. Gebhardt's Verlag, Leipzig.

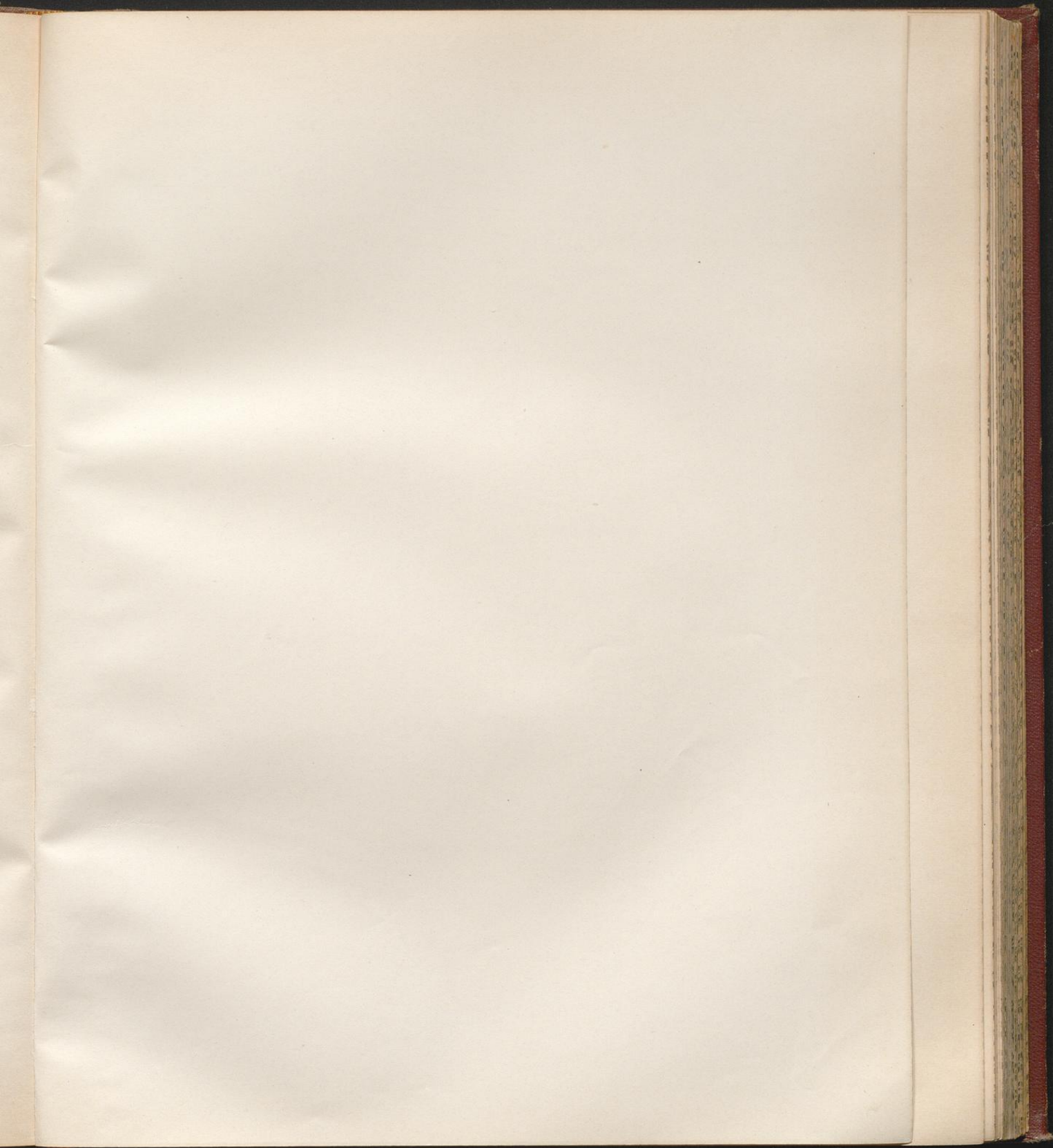


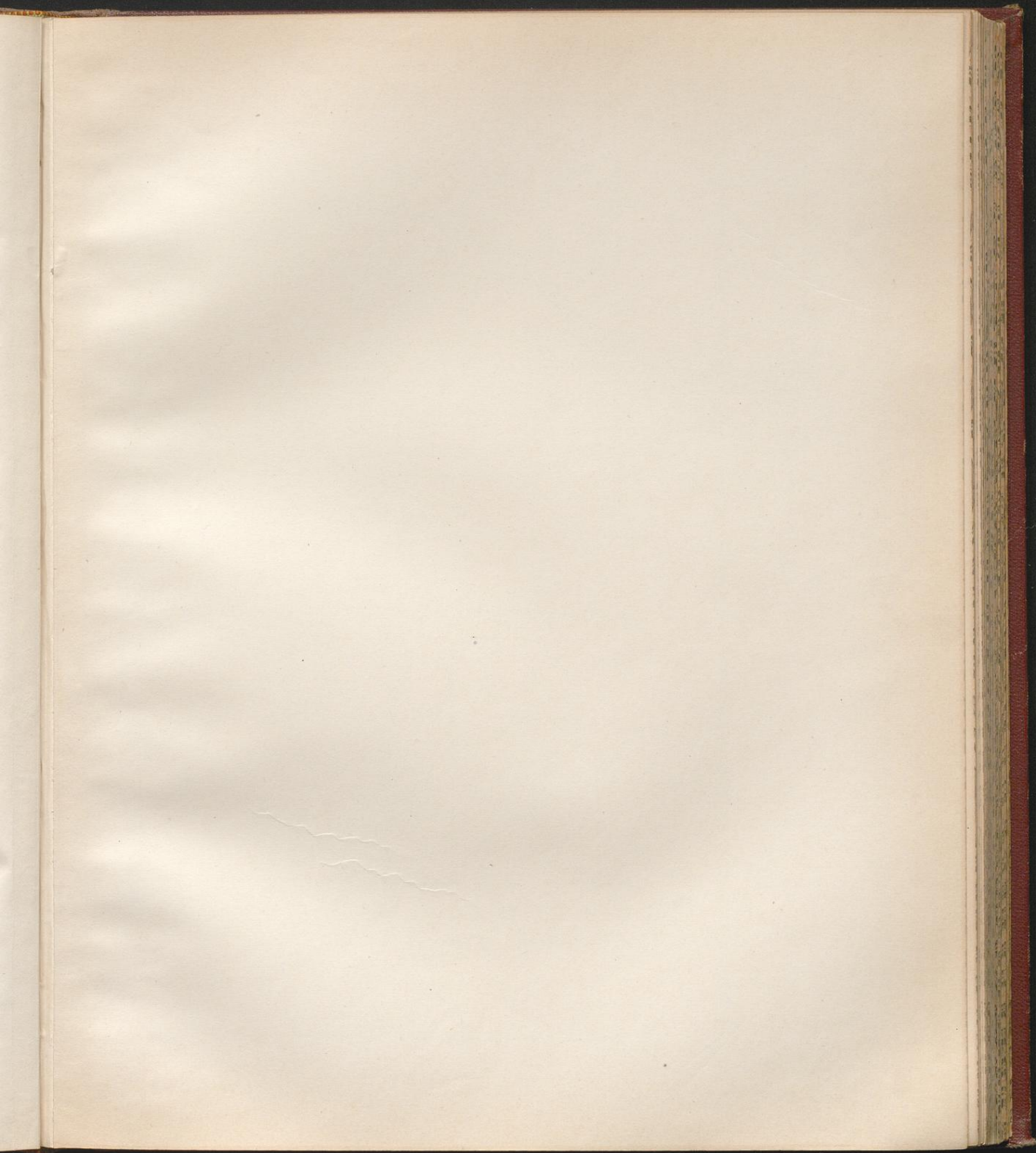
Hallenconstruction, Schlesischer Bahnhof in Berlin.



Braymann II Eisen (6 Aufl.)

J.M. Gebhardt's Verlag, Leipzig.





Bahnhofshalle in Frankfurt a. M.

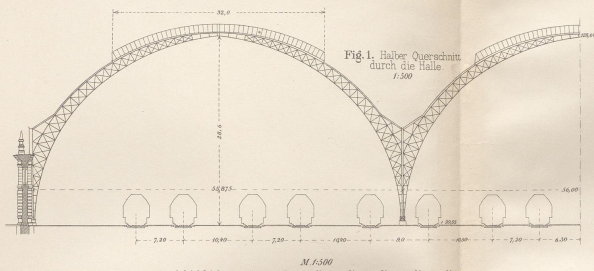


Fig. 1. Halber Querschnitt durch die Halle 1:500

Fig. 3-6. Plattenweise 1:30

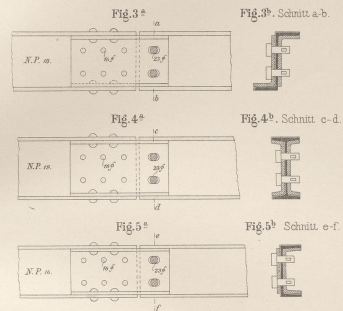


Fig. 3^a

Fig. 3^b. Schnitt a-b

Fig. 4^a

Fig. 4^b. Schnitt c-d

Fig. 5^a

Fig. 5^b. Schnitt e-f

Fig. 2^a. Grundriss 1:300

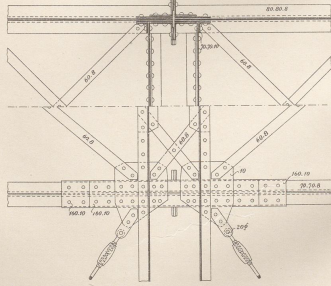


Fig. 2^{a-o}. Scheitelgelenk

Fig. 2^b. Ansicht 1:15

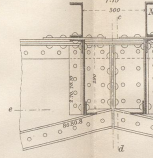


Fig. 2^c. Schnitt c-d 1:15

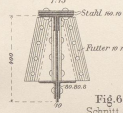


Fig. 2^e. Schnitt a-b 1:15

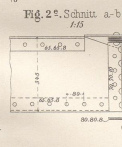


Fig. 2^d. Schnitt e-f 1:15

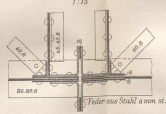


Fig. 6^a. Schnitt g-h 1:15

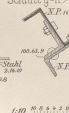
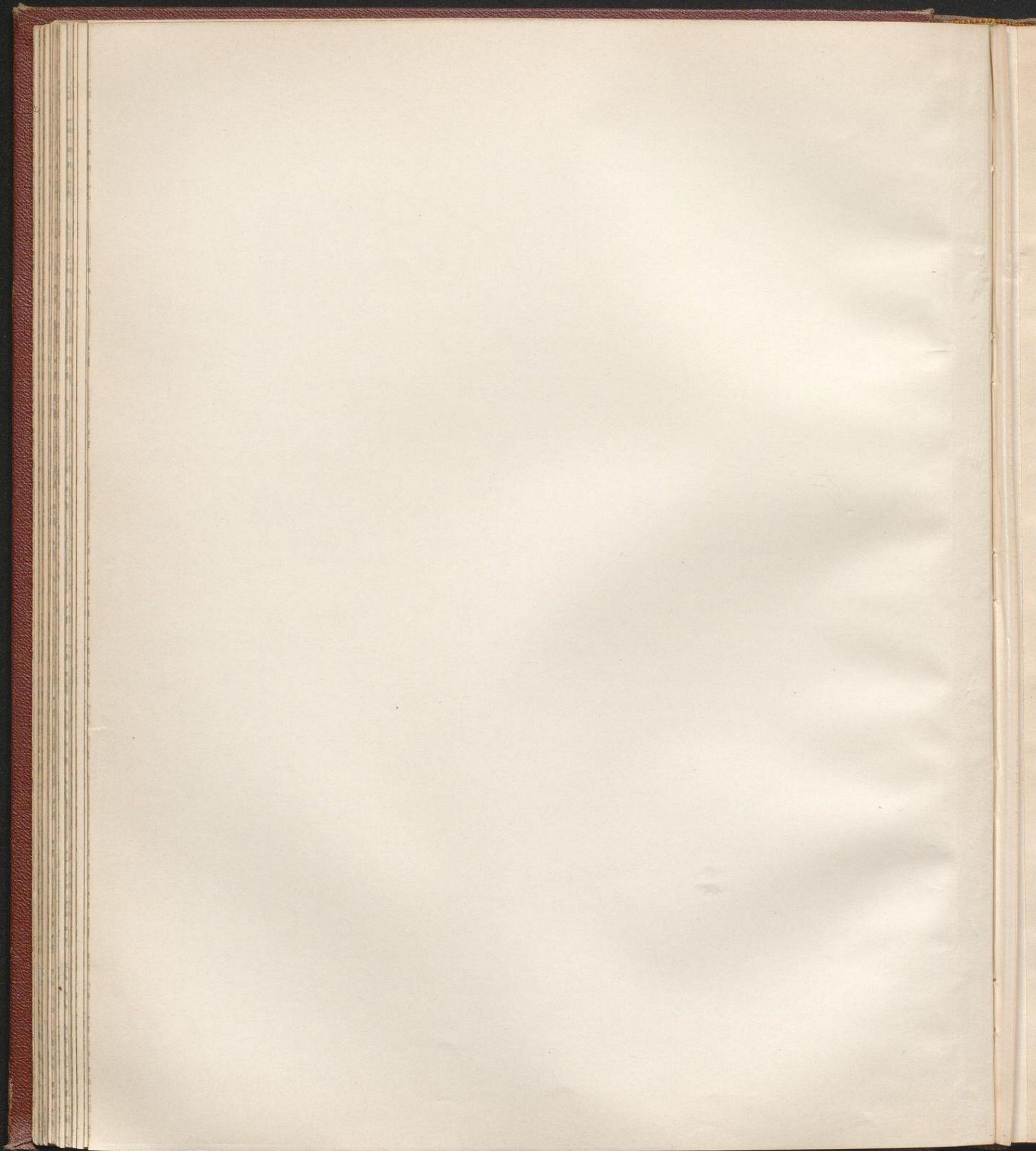
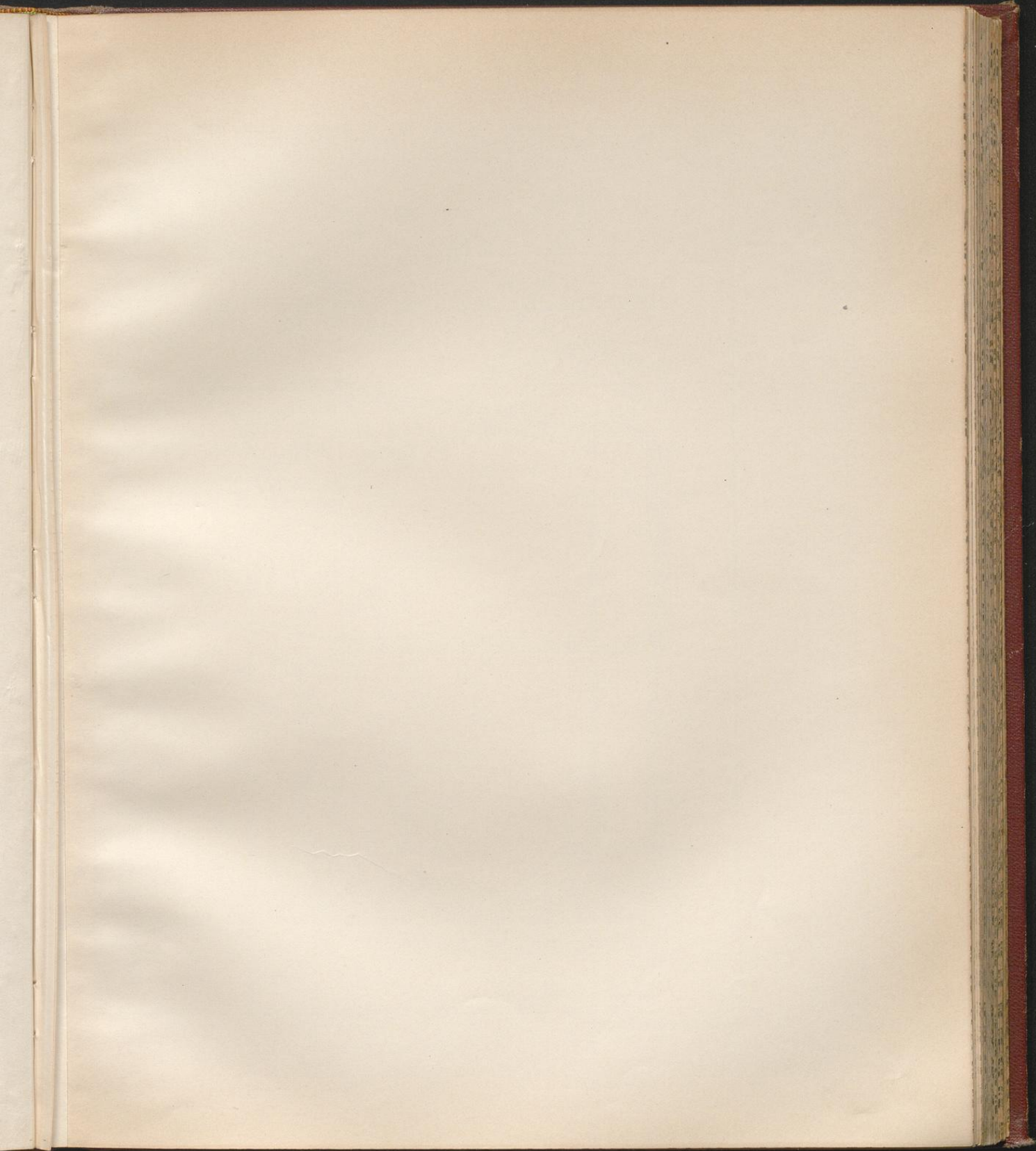


Fig. 6^b

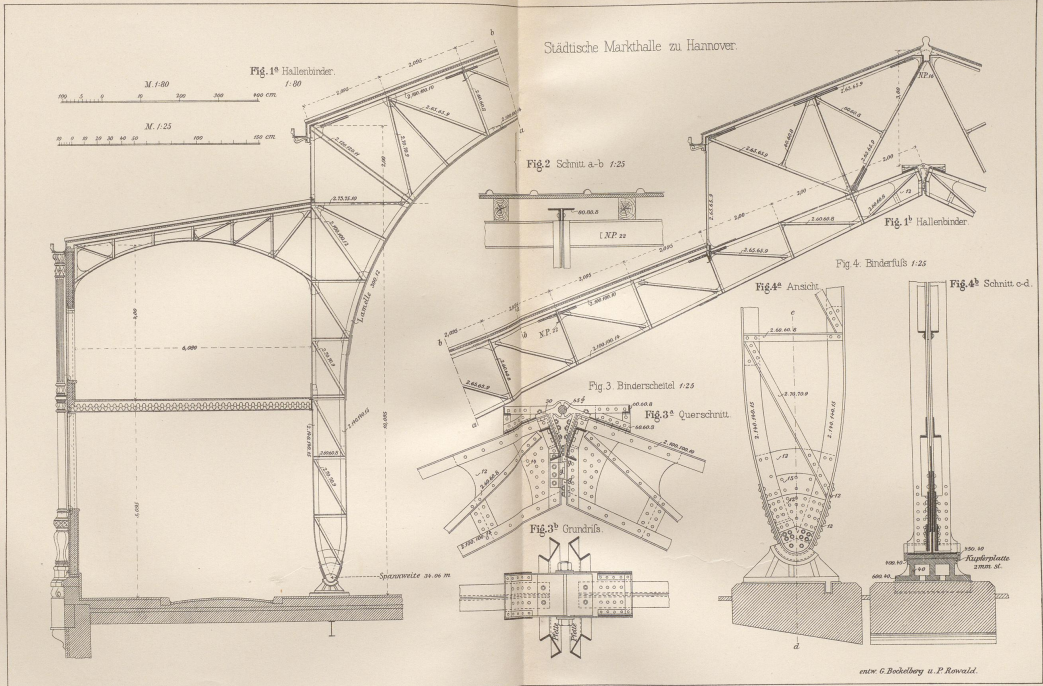


Schnitt i-k





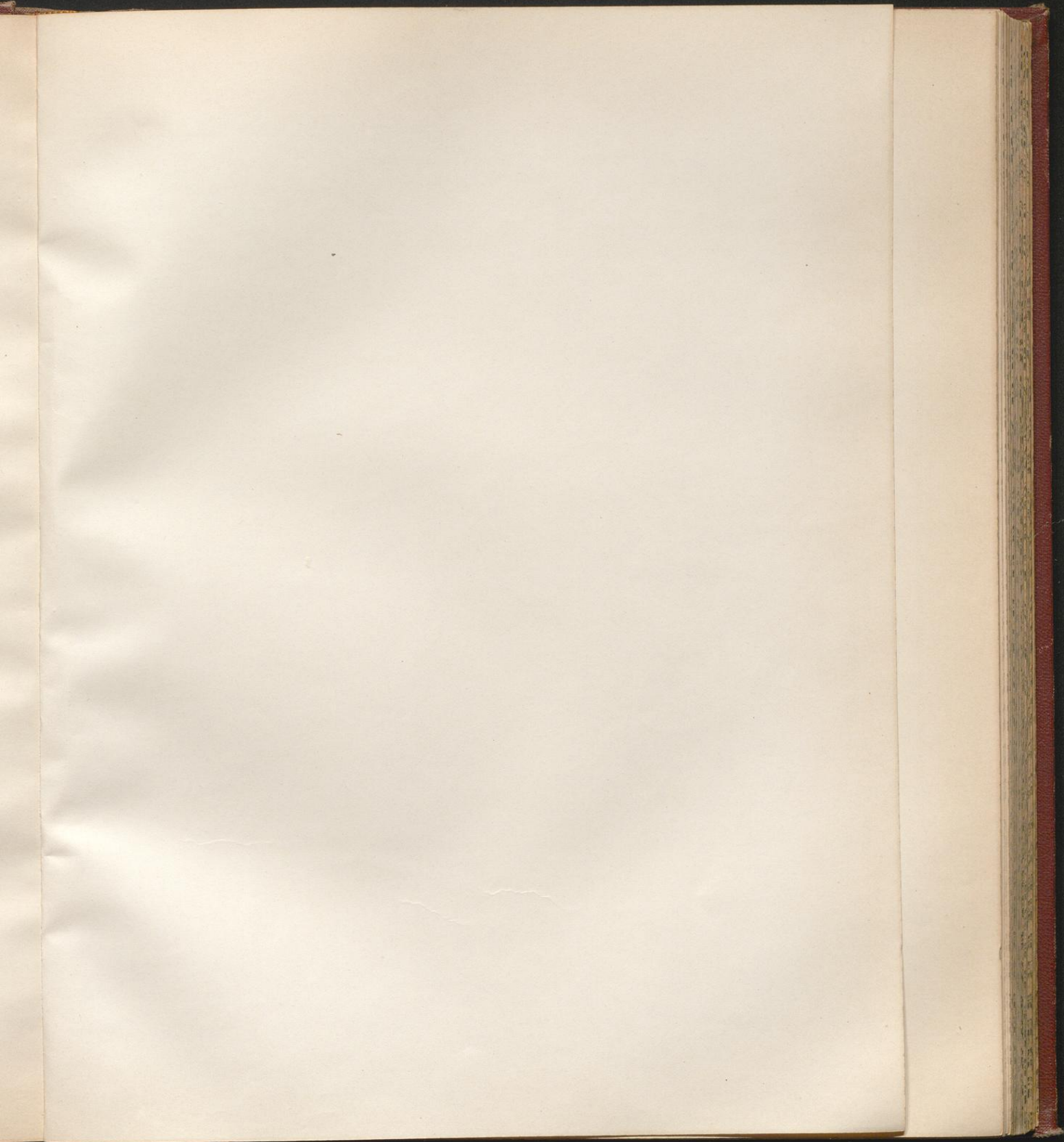
Städtische Markthalle zu Hannover.

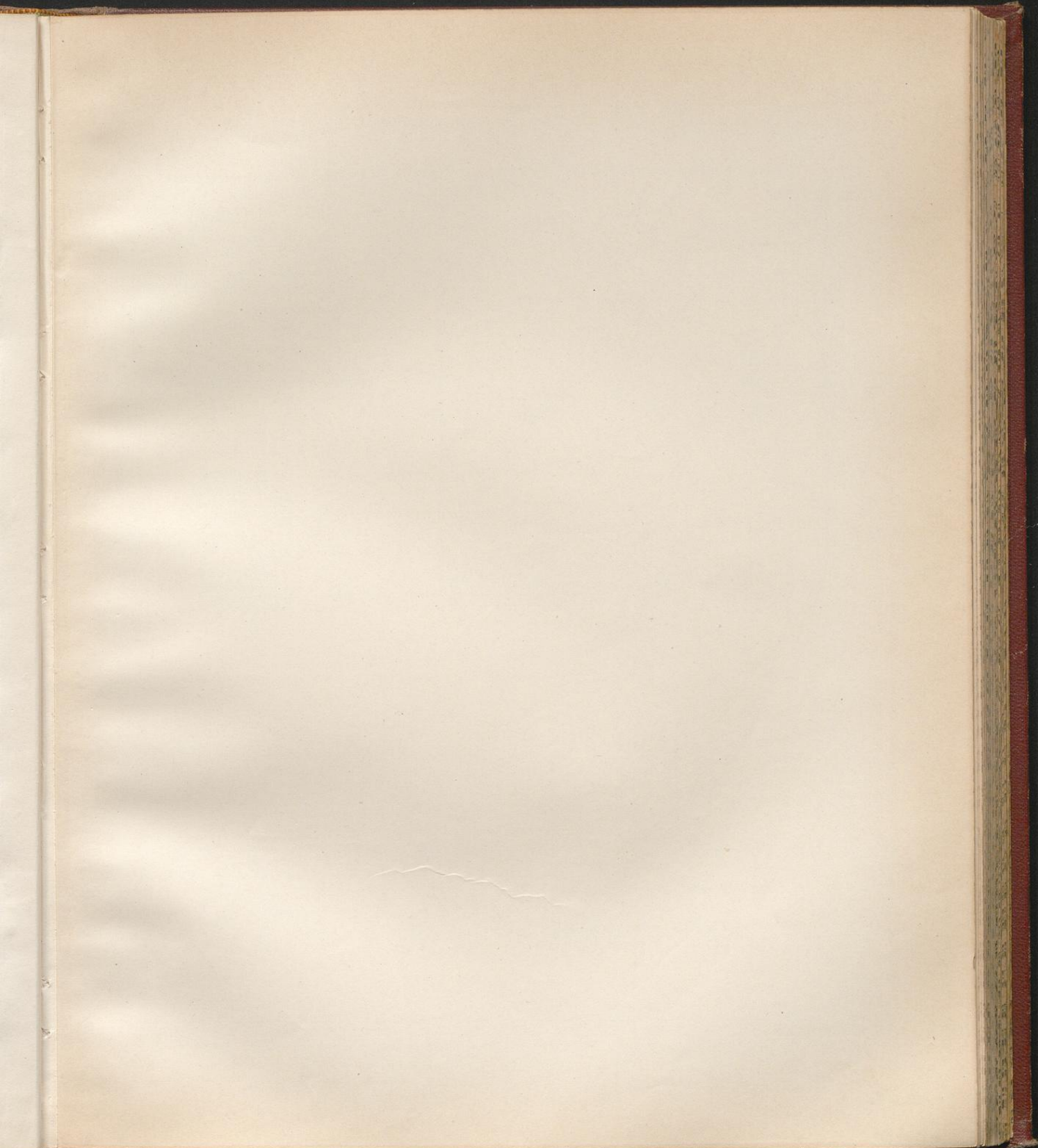


Heymann & Eisen (6. Aufl.)

entw. C. Beckelberg u. P. Roswald.

J.M. Gebhardt's Verlag, Leipzig.





Gelenke der Bogenträger.

Fig. 1-4. Maschinenhalle von der Pariser Ausstellung 1889.

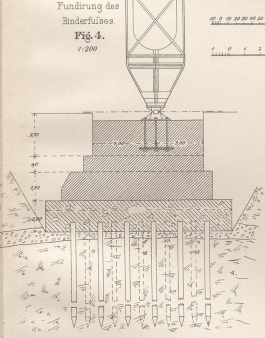
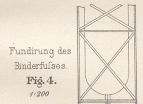
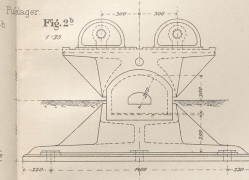
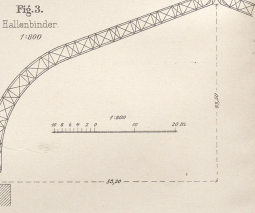
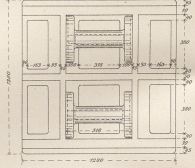
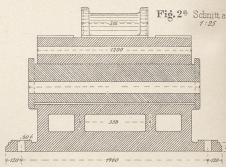
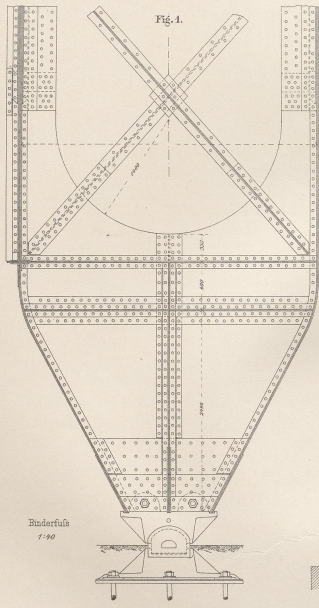
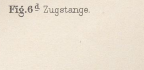
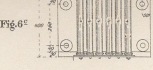
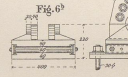
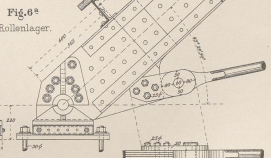
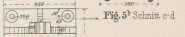
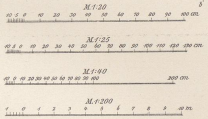
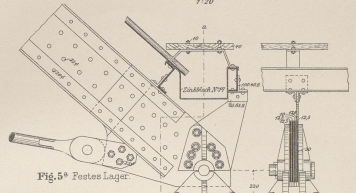
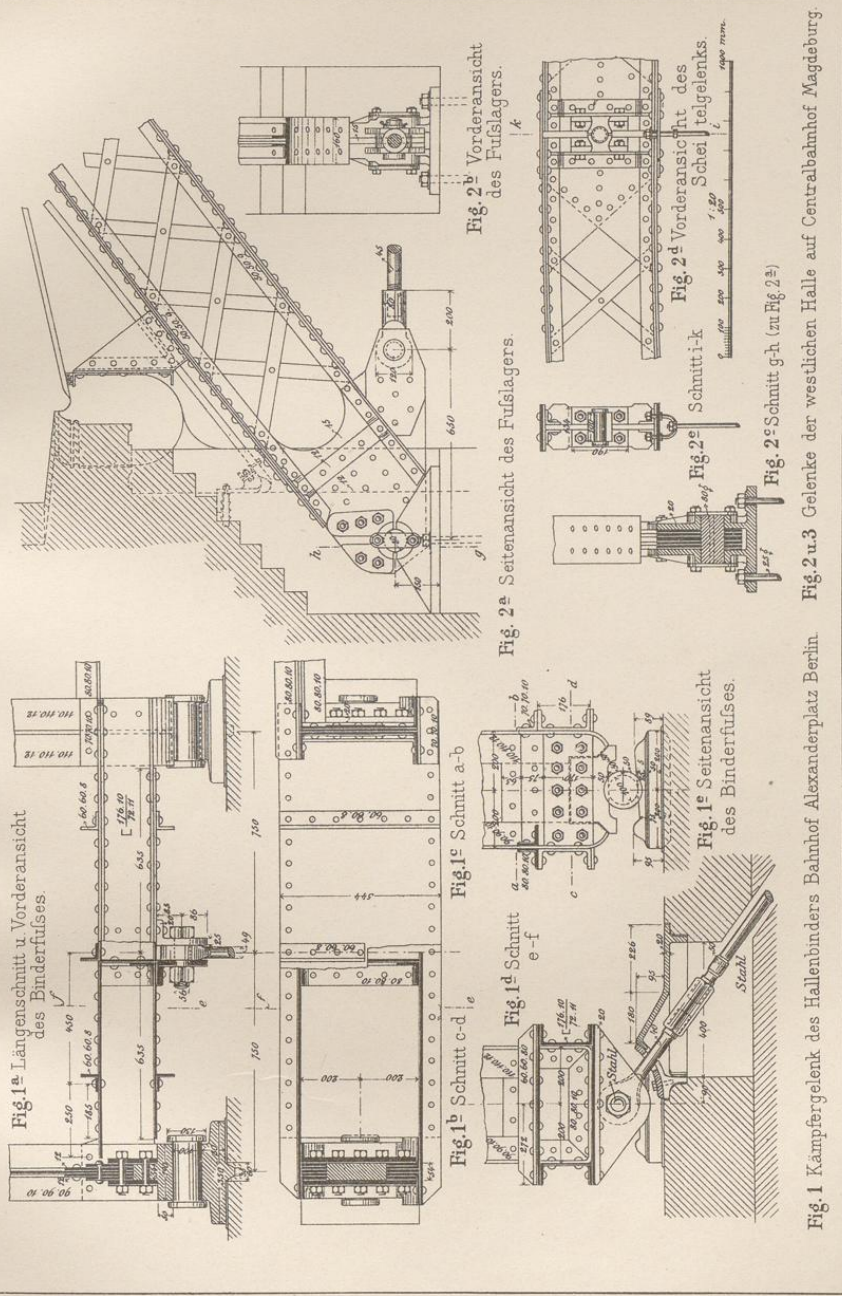


Fig. 5 u. 6. Fußlager der Bahnhofshalle in Hannover.



Gelenke der Bogenträger.

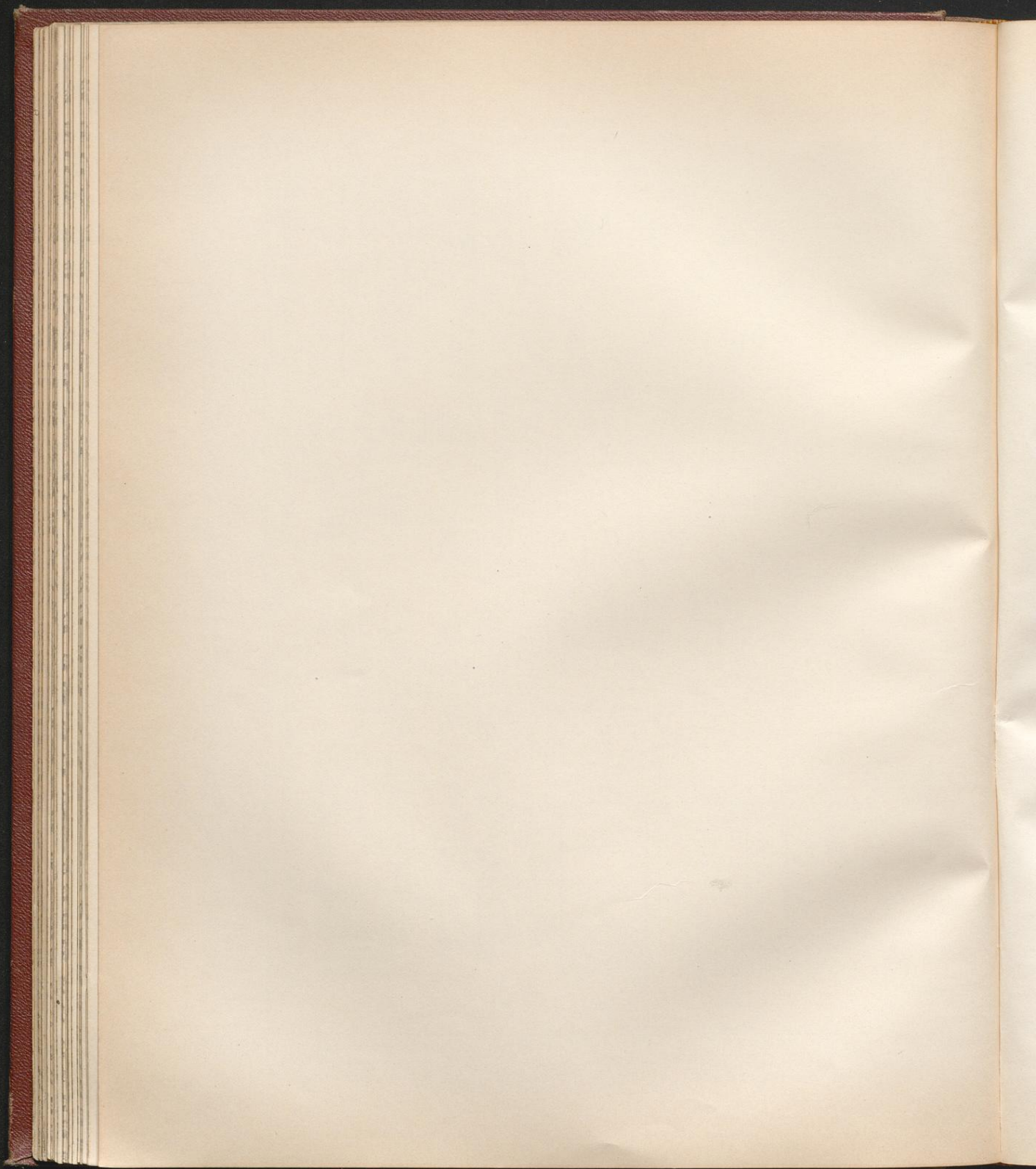


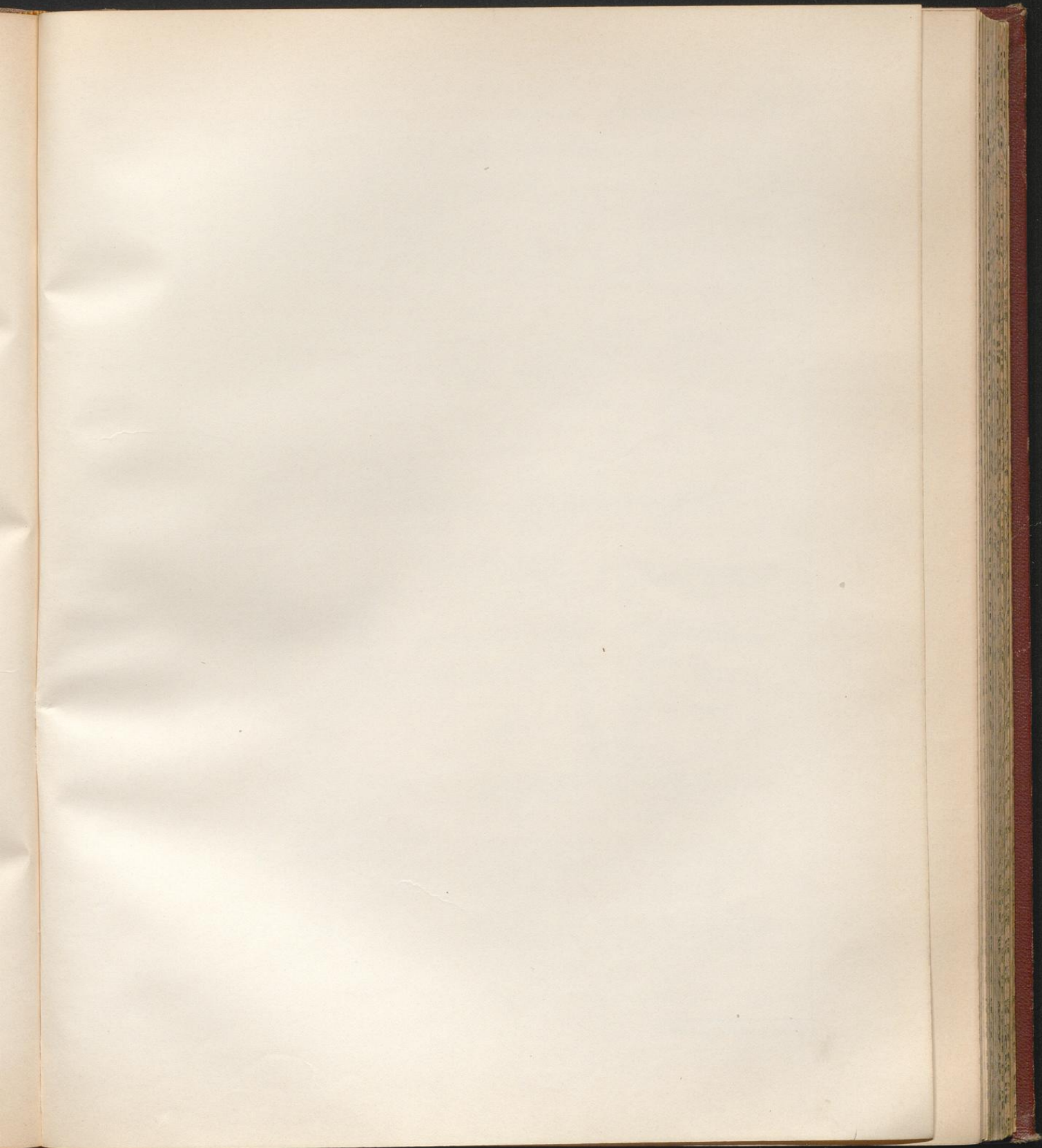
Breymann III Eisen (6. Aufl.)

J.M. Gebhardt's Verlag, Leipzig.

Fig. 2 u. 3 Gelenke der westlichen Halle auf Centralbahnhof Magdeburg.

Fig. 1 Kämpfergelenk des Hallenbinders Bahnhof Alexanderplatz Berlin.





Gelenke der Bogenträger.

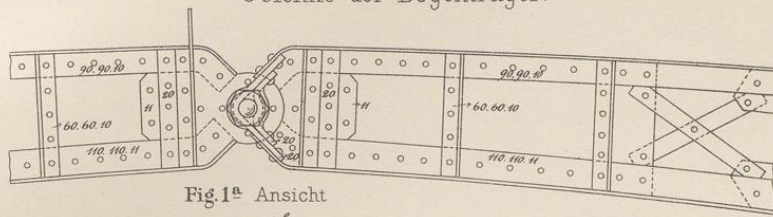


Fig. 1^a Ansicht

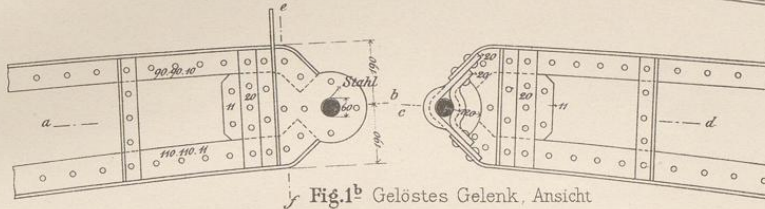


Fig. 1^b Gelöstes Gelenk, Ansicht

Fig. 1 Scheitelgelenk der Halle auf Bahnhof Alexanderplatz Berlin.



Fig. 1^c Schnitt a-b

Fig. 1^d Schnitt c-d

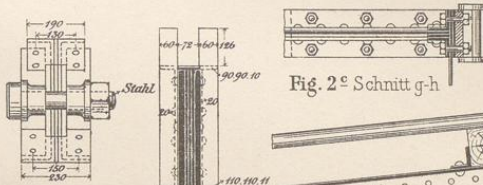


Fig. 2^c Schnitt g-h

Fig. 2 Scheitelgelenk der Halle des Ostbahnhofes Berlin

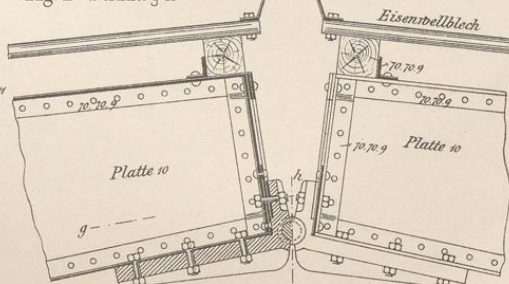


Fig. 2^a Schnitt

Fig. 2^b Ansicht

Fig. 1^e Vorderansicht (zu Fig. 1^b)

Fig. 1^f Schnitt e-f (zu Fig. 1^b)

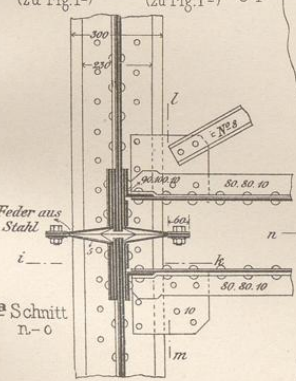


Fig. 3^a Schnitt n-o

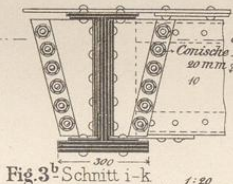


Fig. 3^b Schnitt i-k

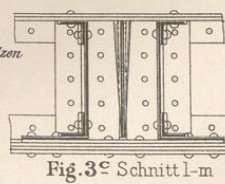
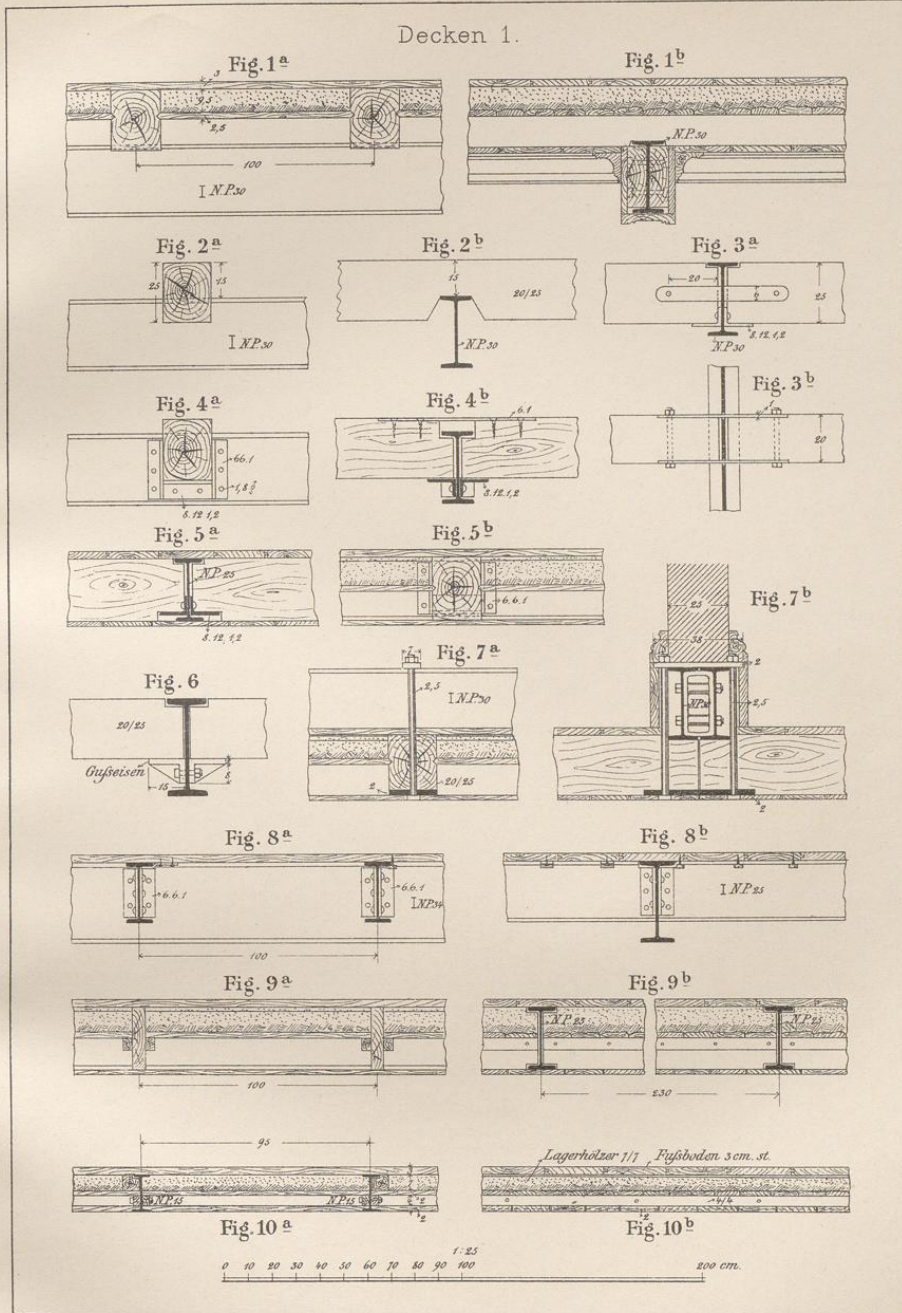
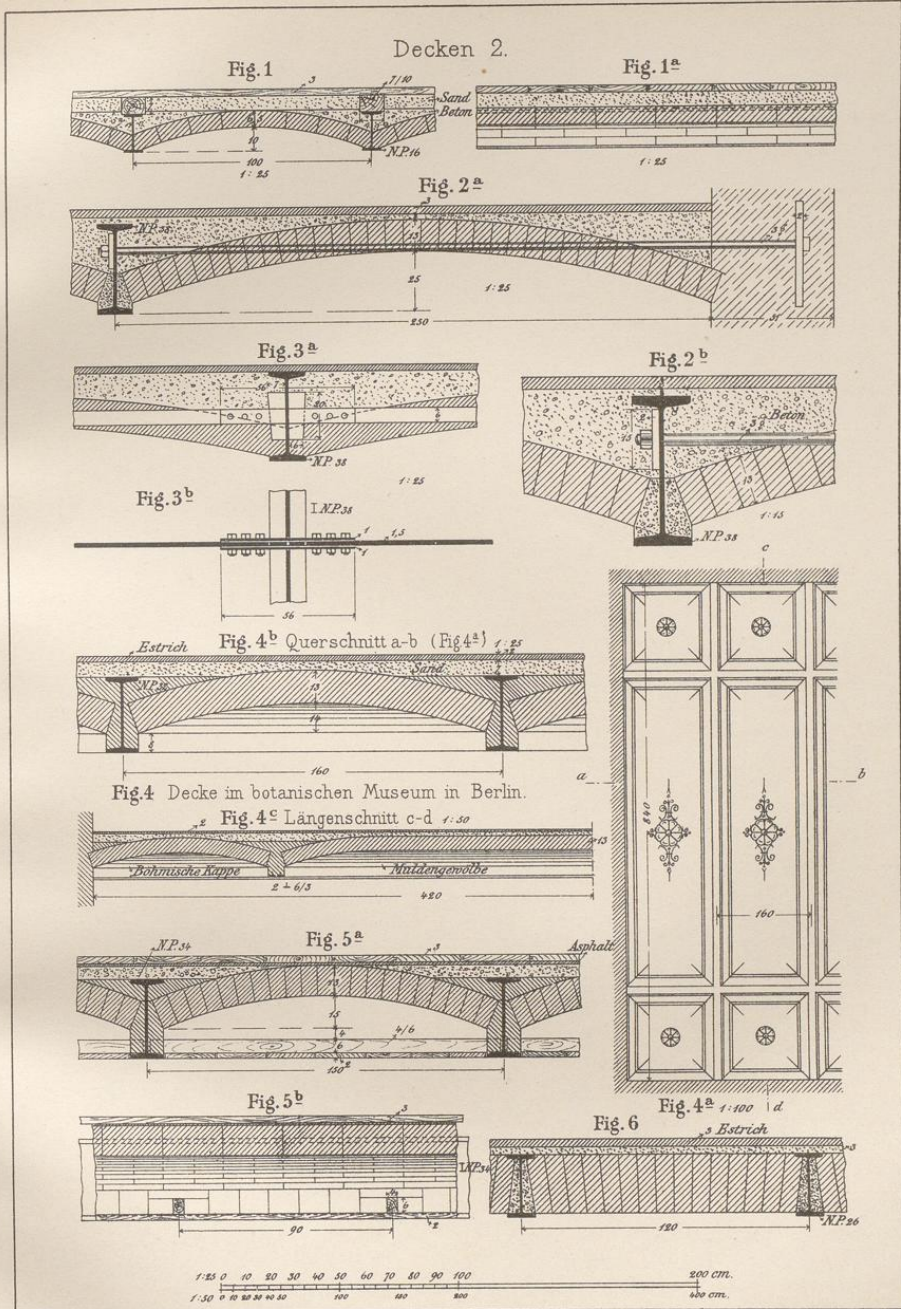


Fig. 3^c Schnitt l-m

Fig. 3 Scheitelgelenk an Bogenbrücken der Berliner Stadtbahn.

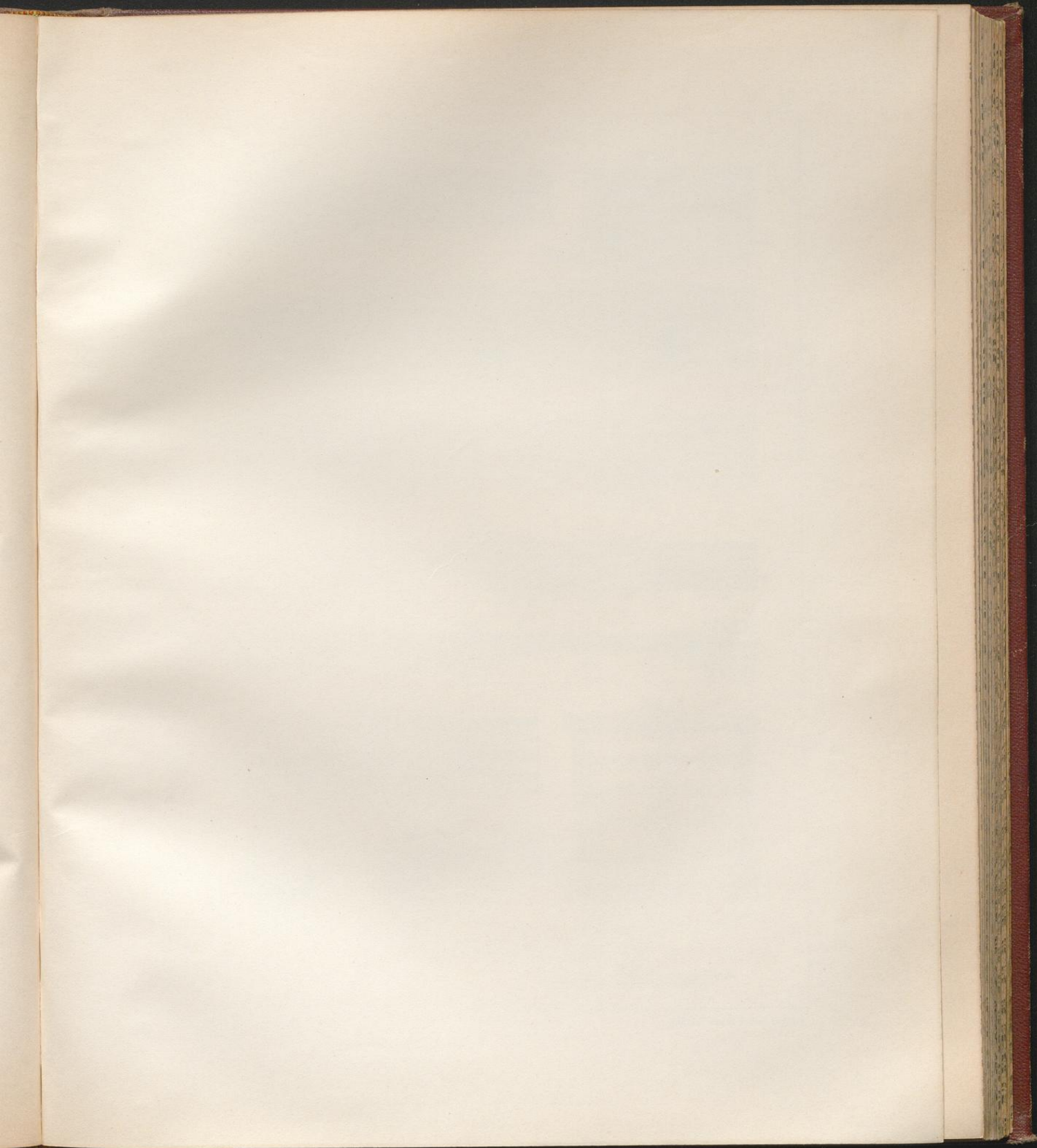
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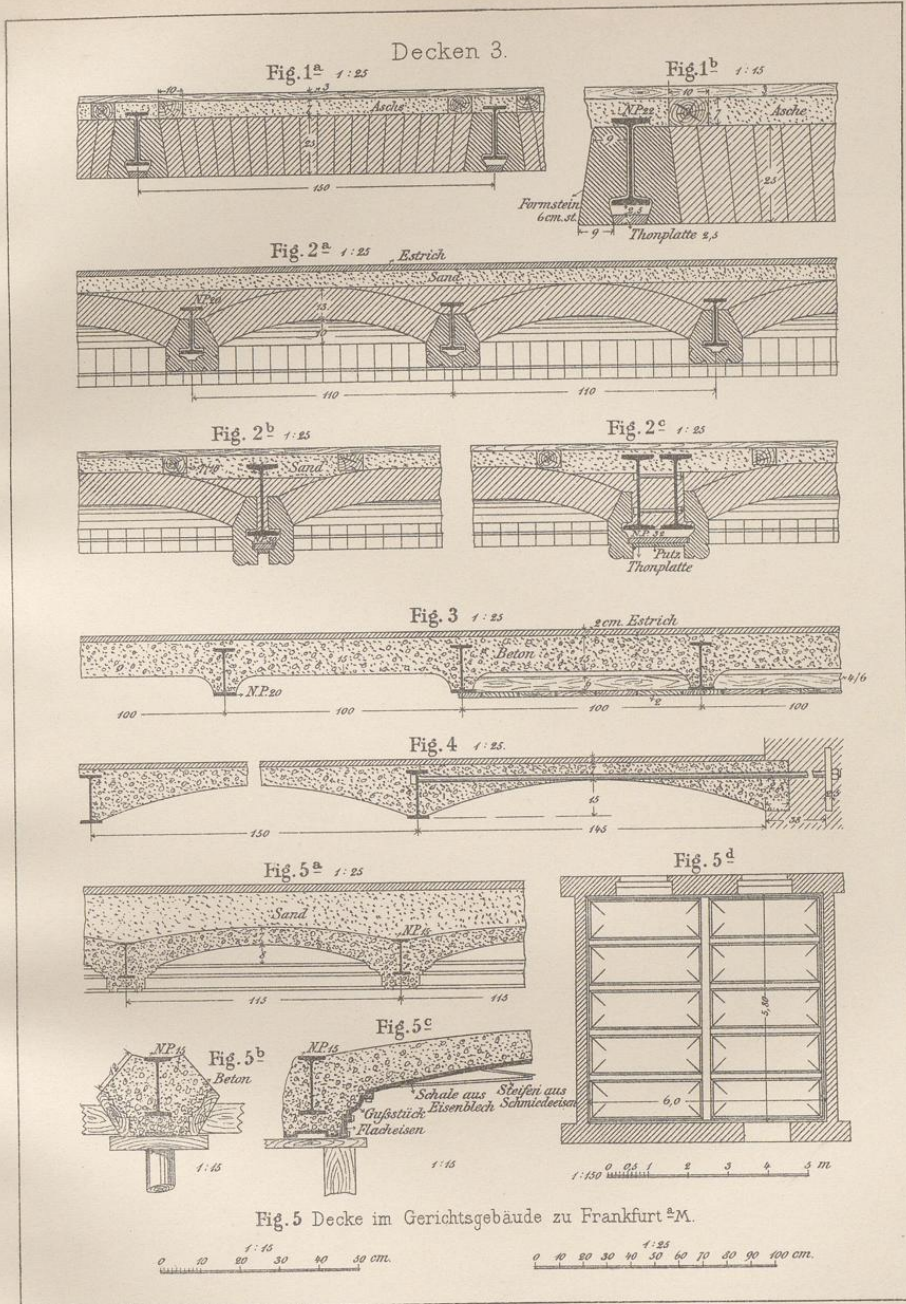


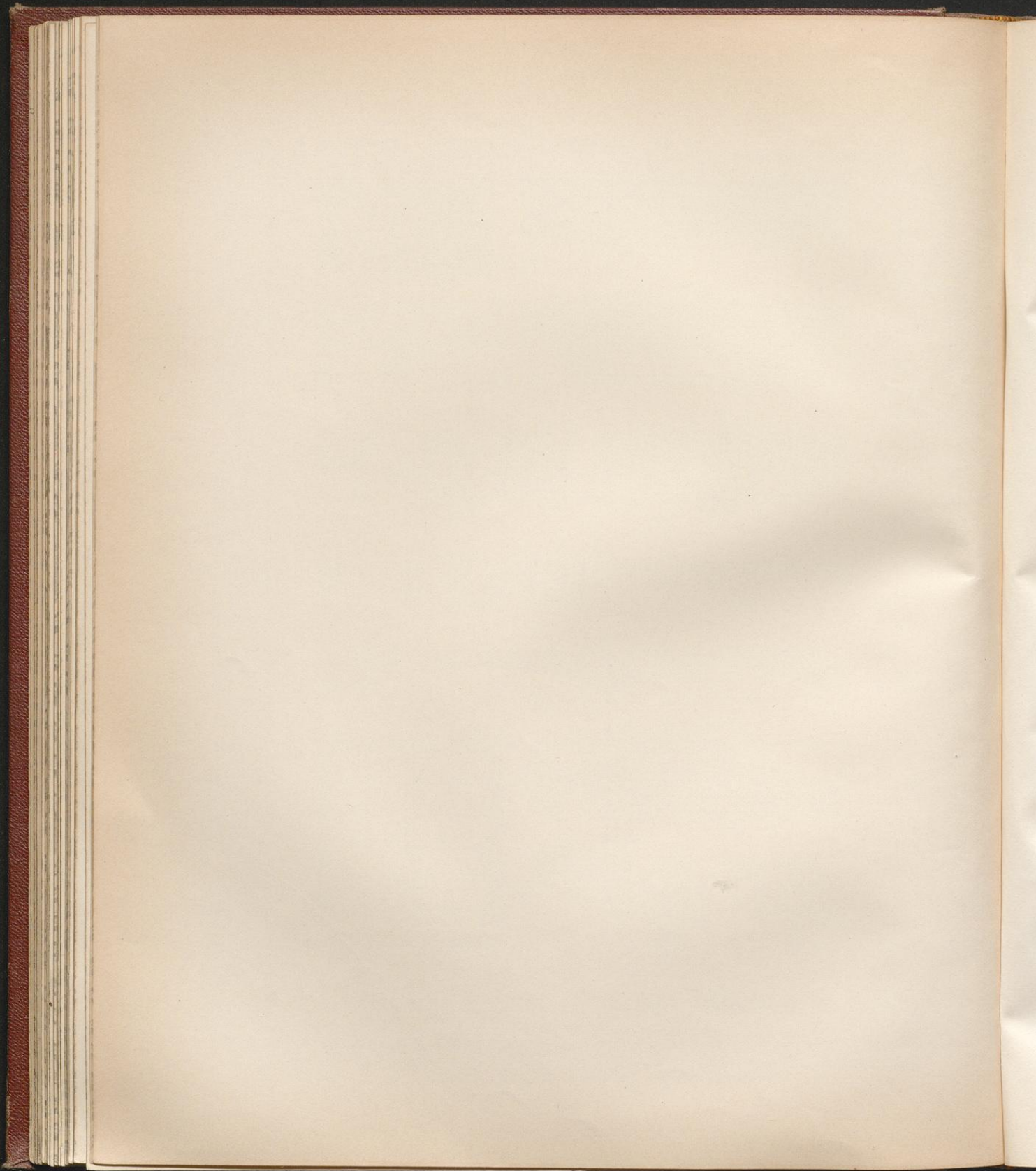


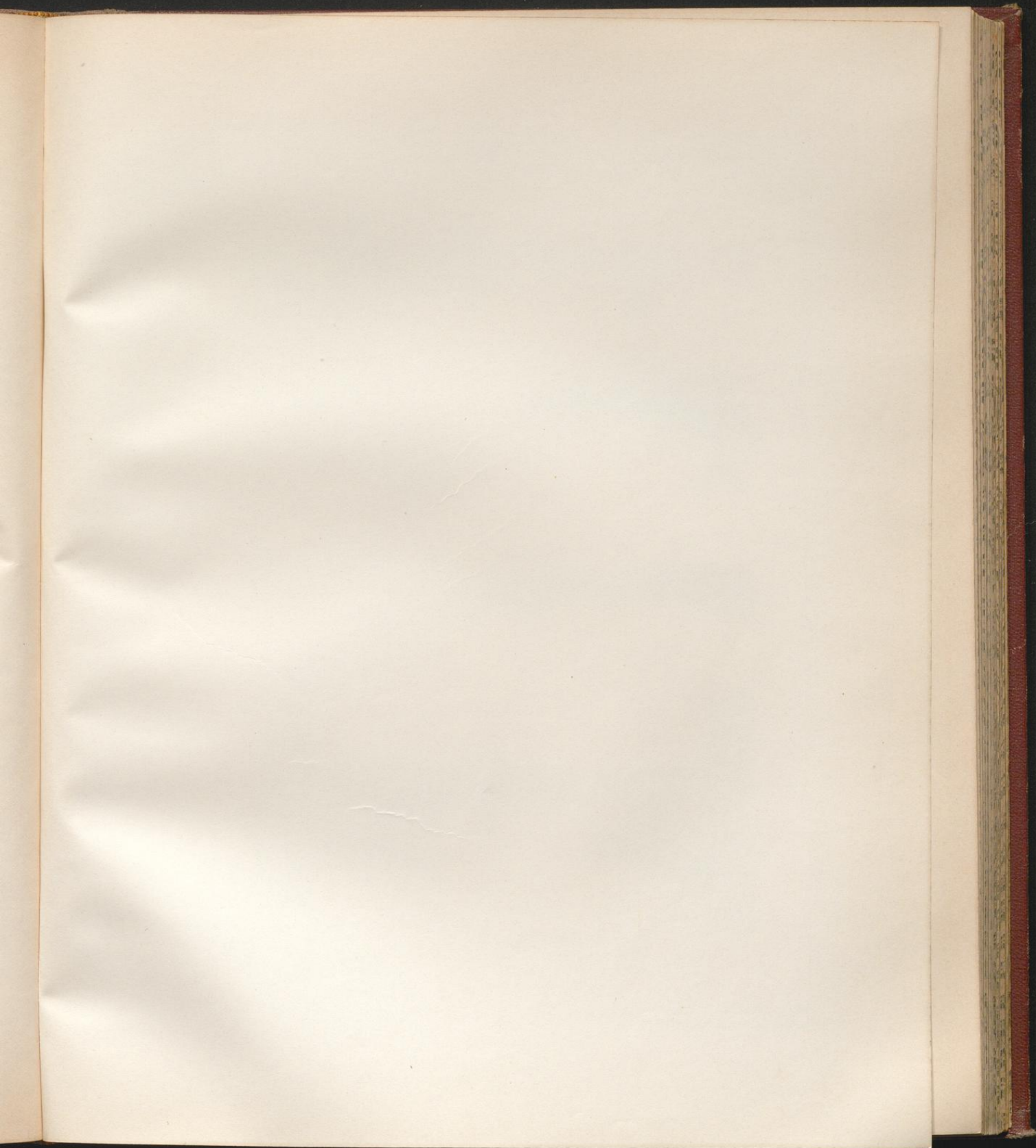
Breymann III Eisen (6. Aufl)

J.M. Gebhardt's Verlag, Leipzig.









Decken.

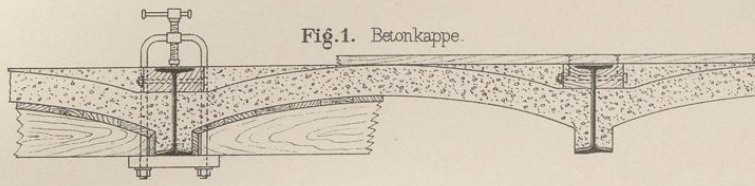


Fig. 1. Betonkappe.

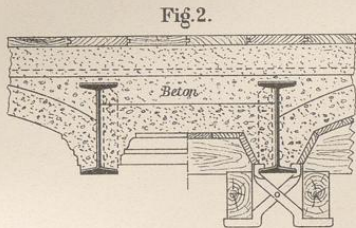


Fig. 2.

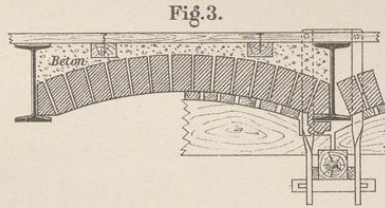


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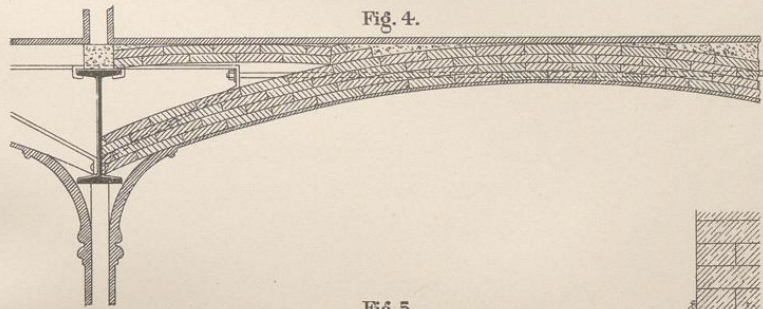


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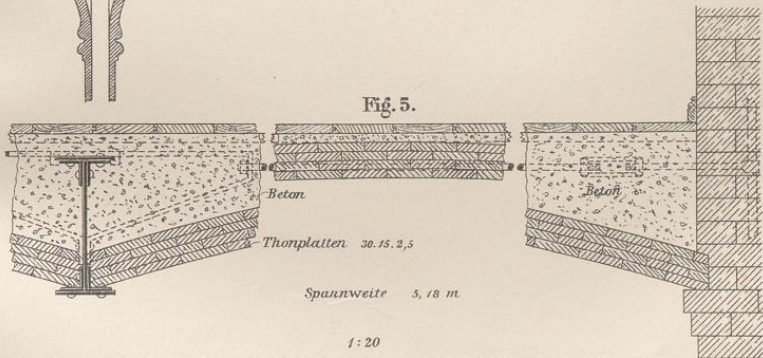


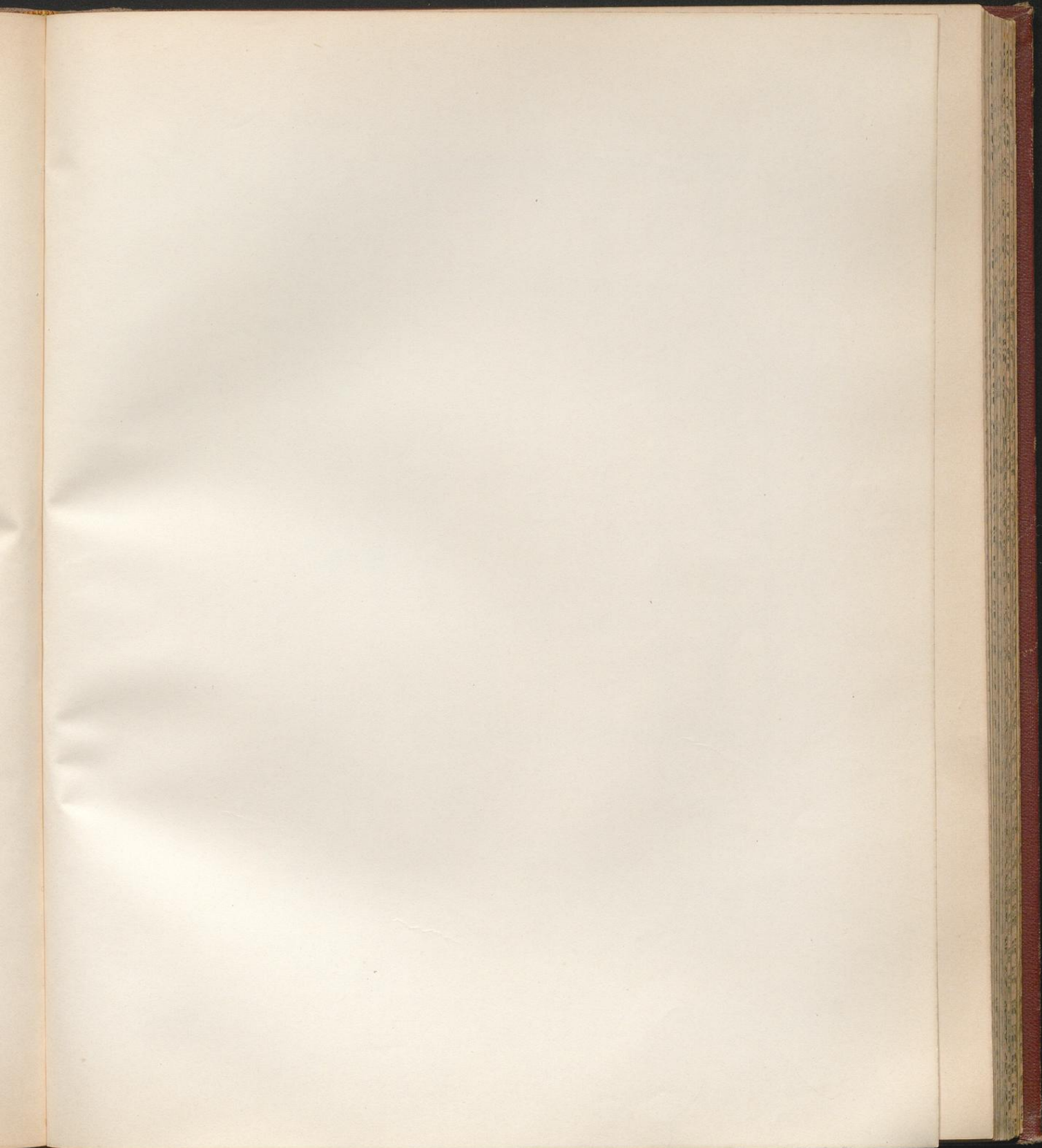
Fig. 5.

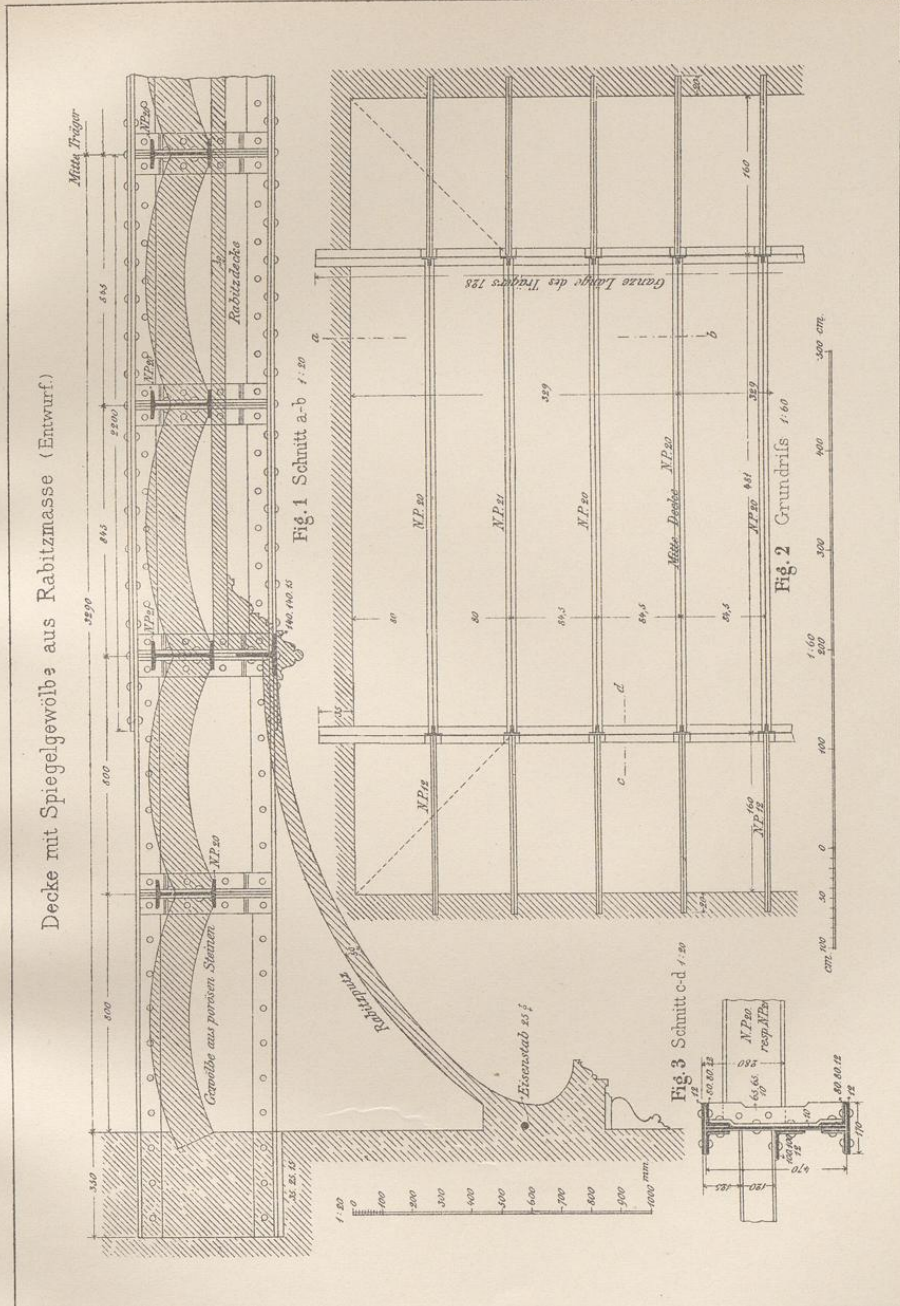
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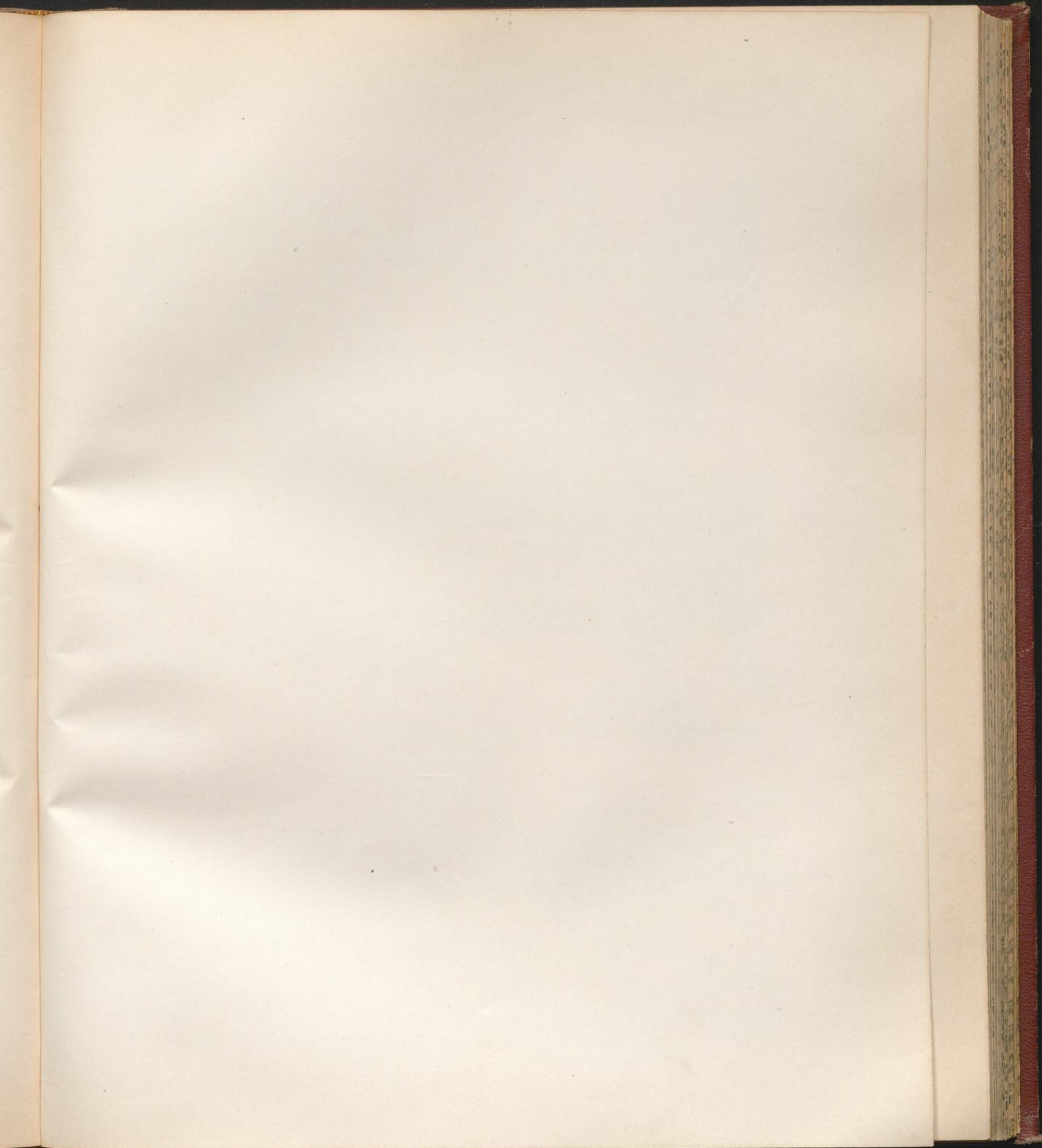
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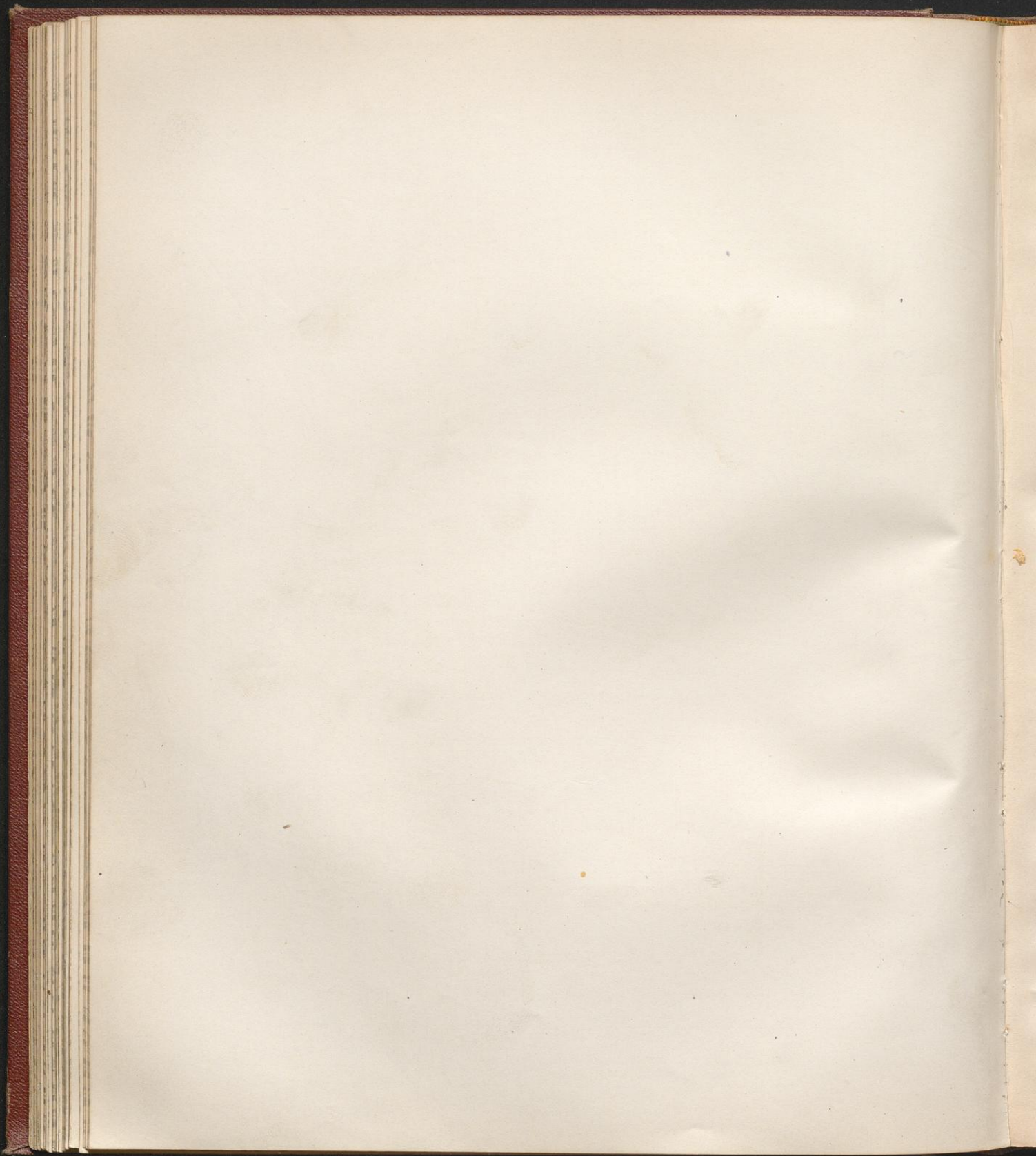
1:20

10 5 0 10 20 30 40 50 60 70 80 90 100 110 120 130 cm









Kleine'sche Decke.

Fig. 1 Aufsicht von oben

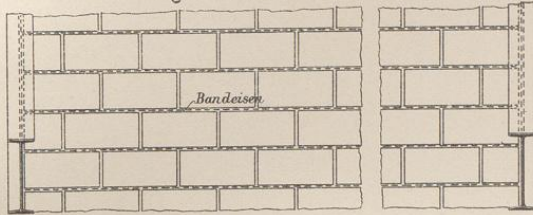


Fig. 2a Querschnitt.

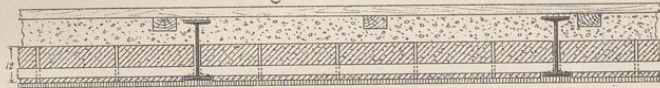


Fig. 3a Längsschnitt.



Fig. 3b Längsschnitt.



Fig. 4a

Querschnitt bei hochliegender Platte und hochkantigen Steinen.

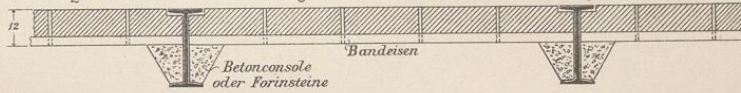


Fig. 4b

Querschnitt bei hochliegender Platte und flachen Steinen.

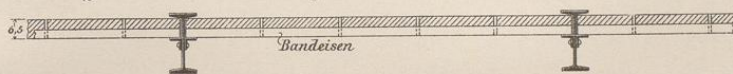
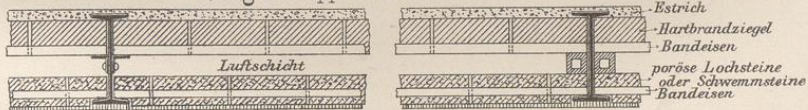
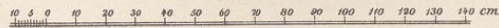
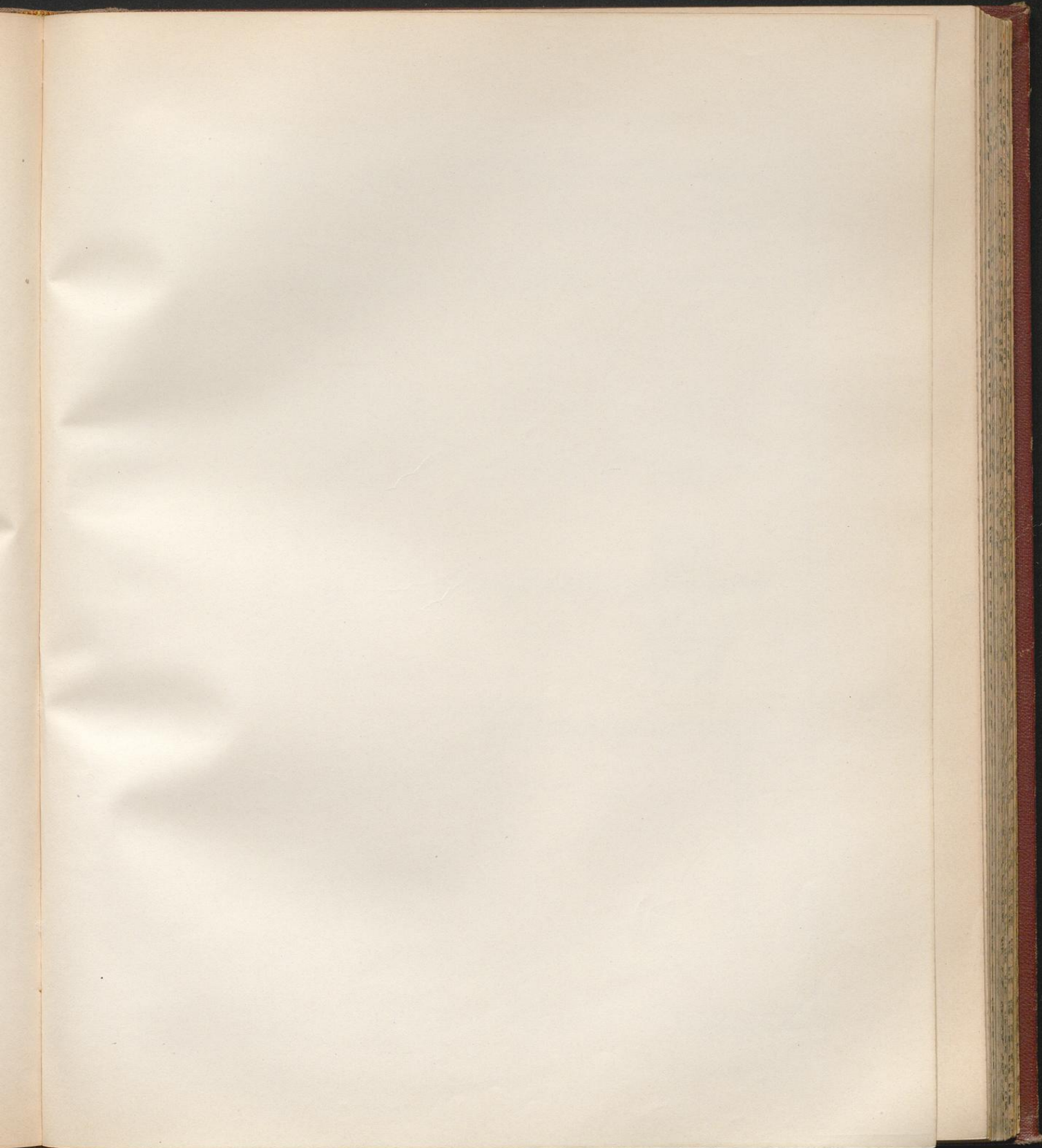


Fig. 5 Doppeldecke.

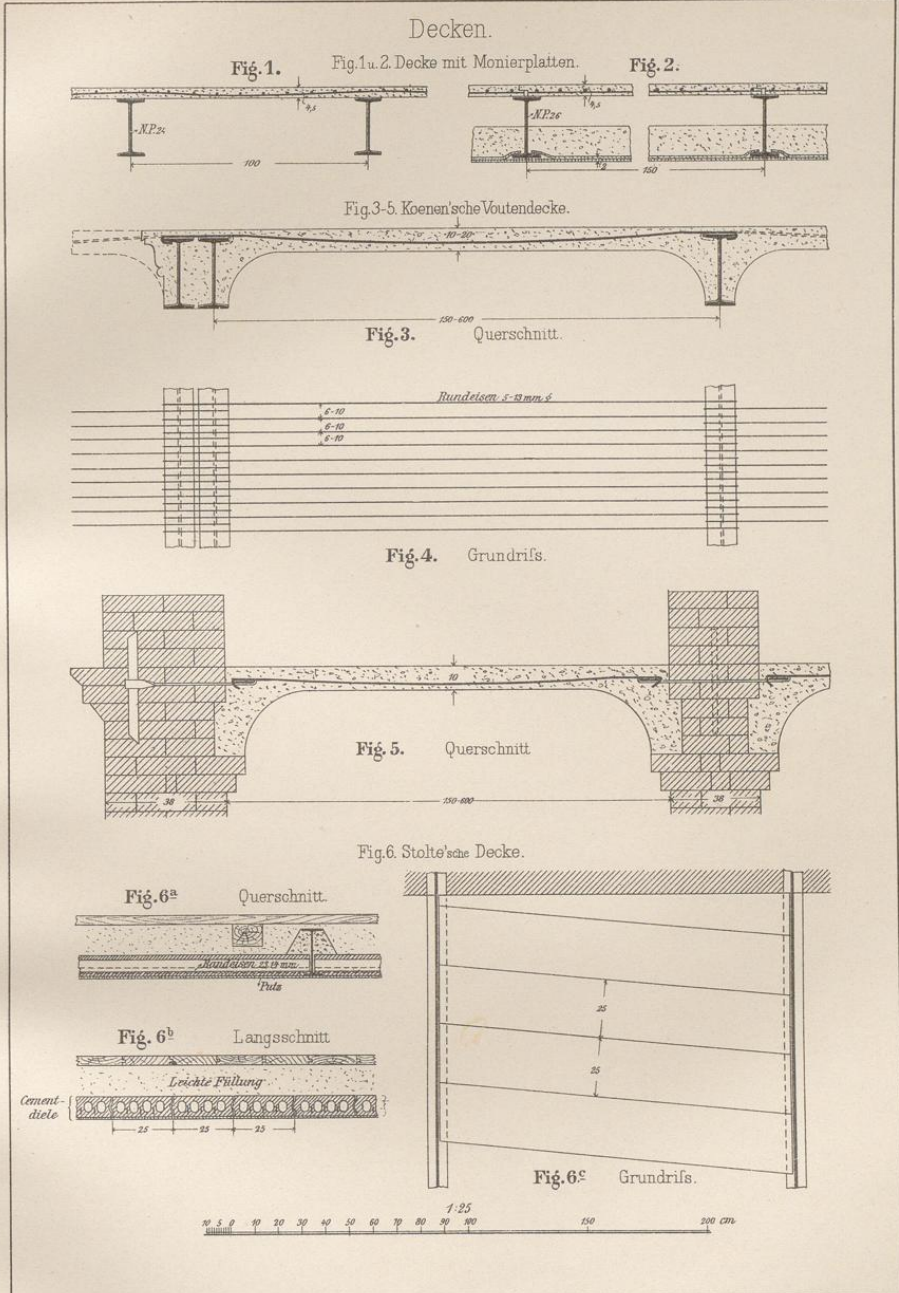


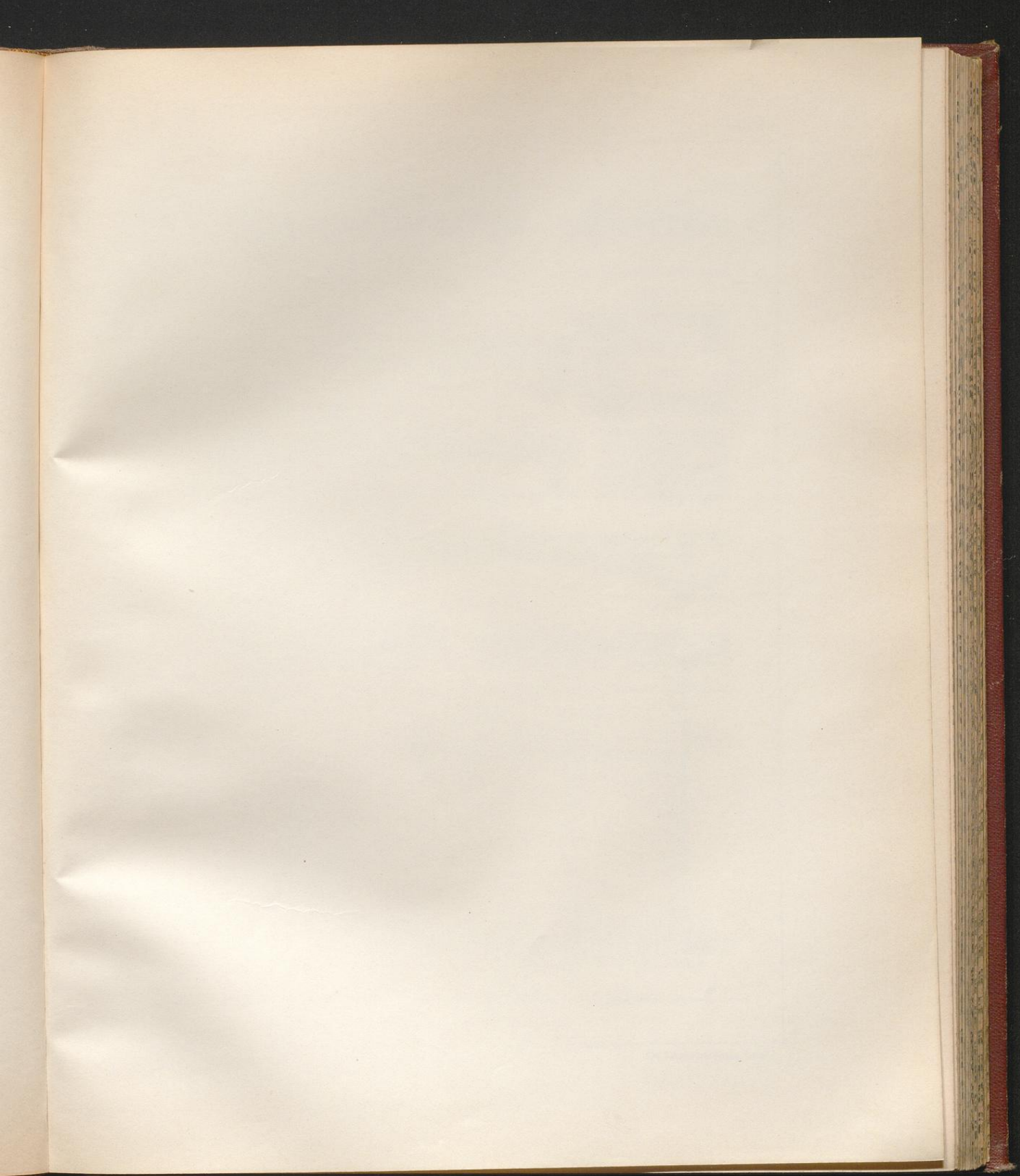
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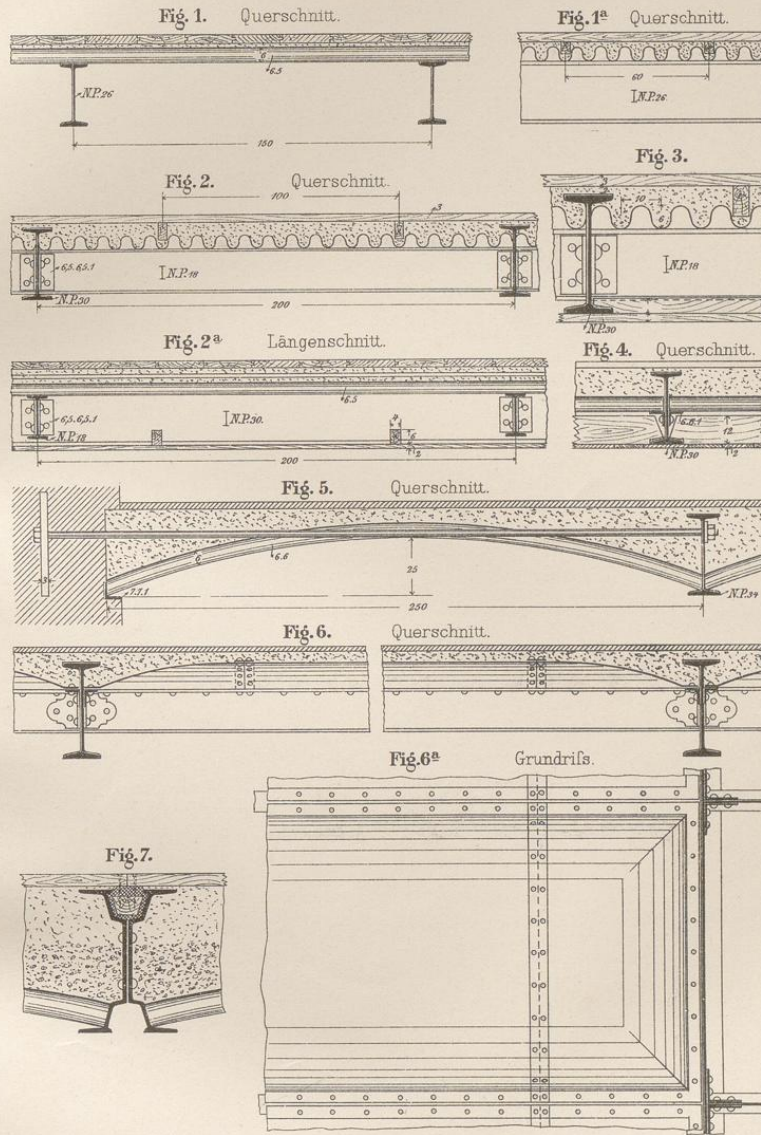


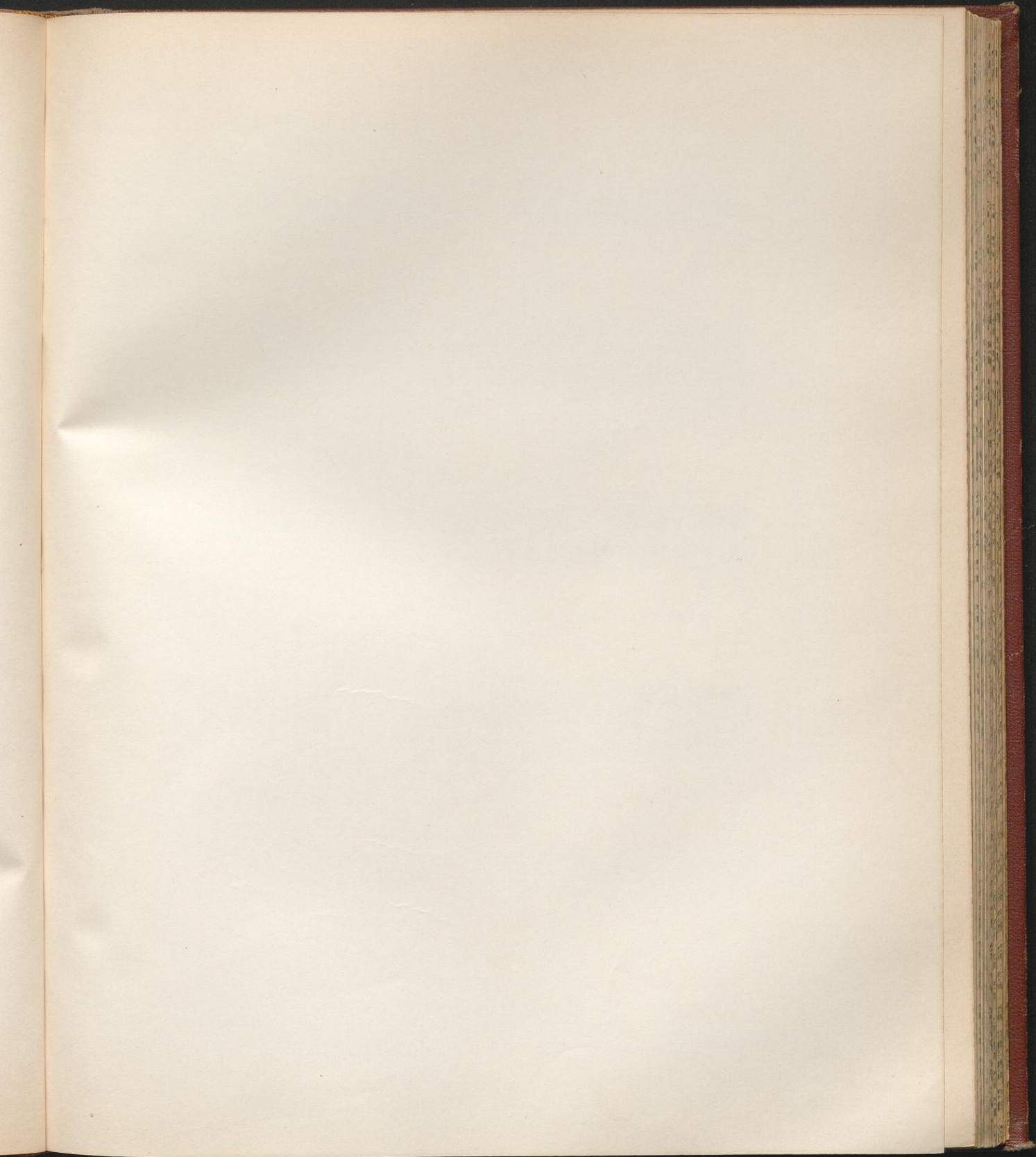
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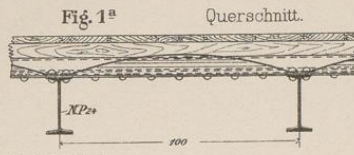
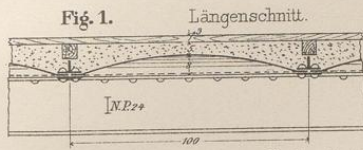


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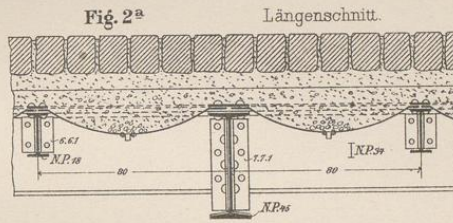
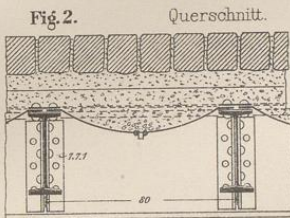




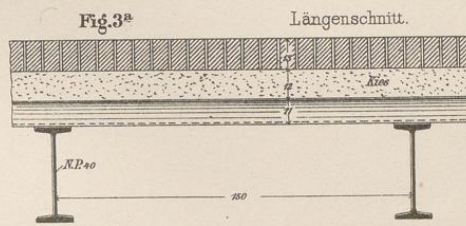
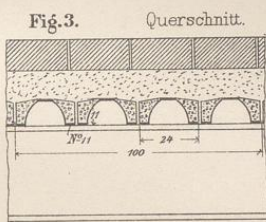
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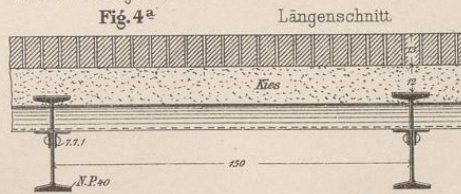
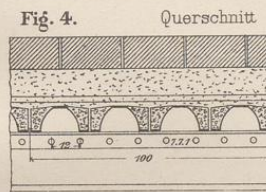
Decke mit stehenden Buckelplatten.



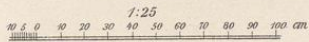
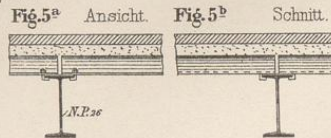
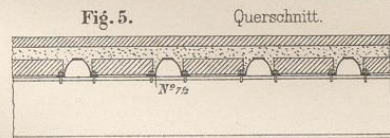
Decke mit hängenden Buckelplatten.

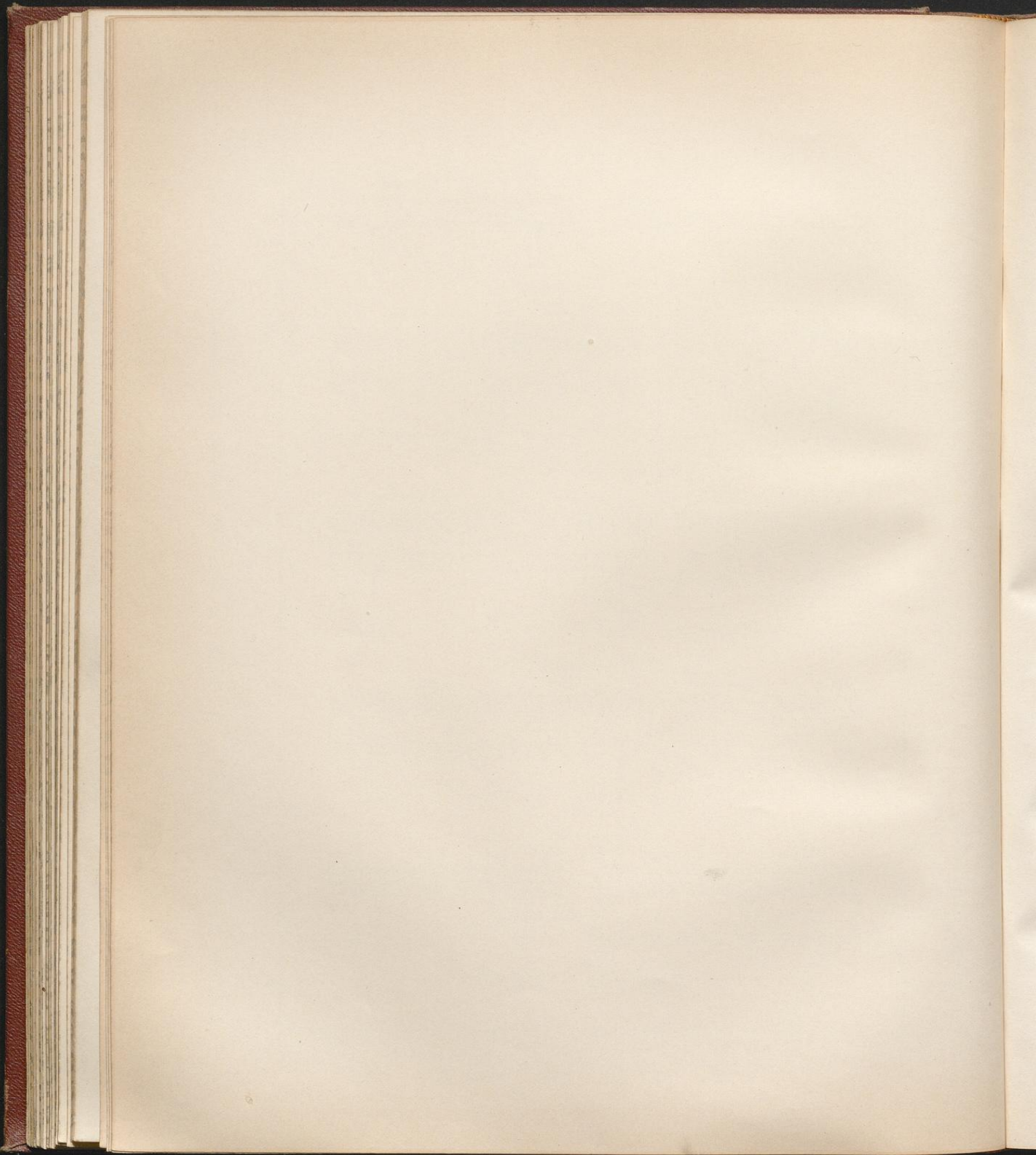


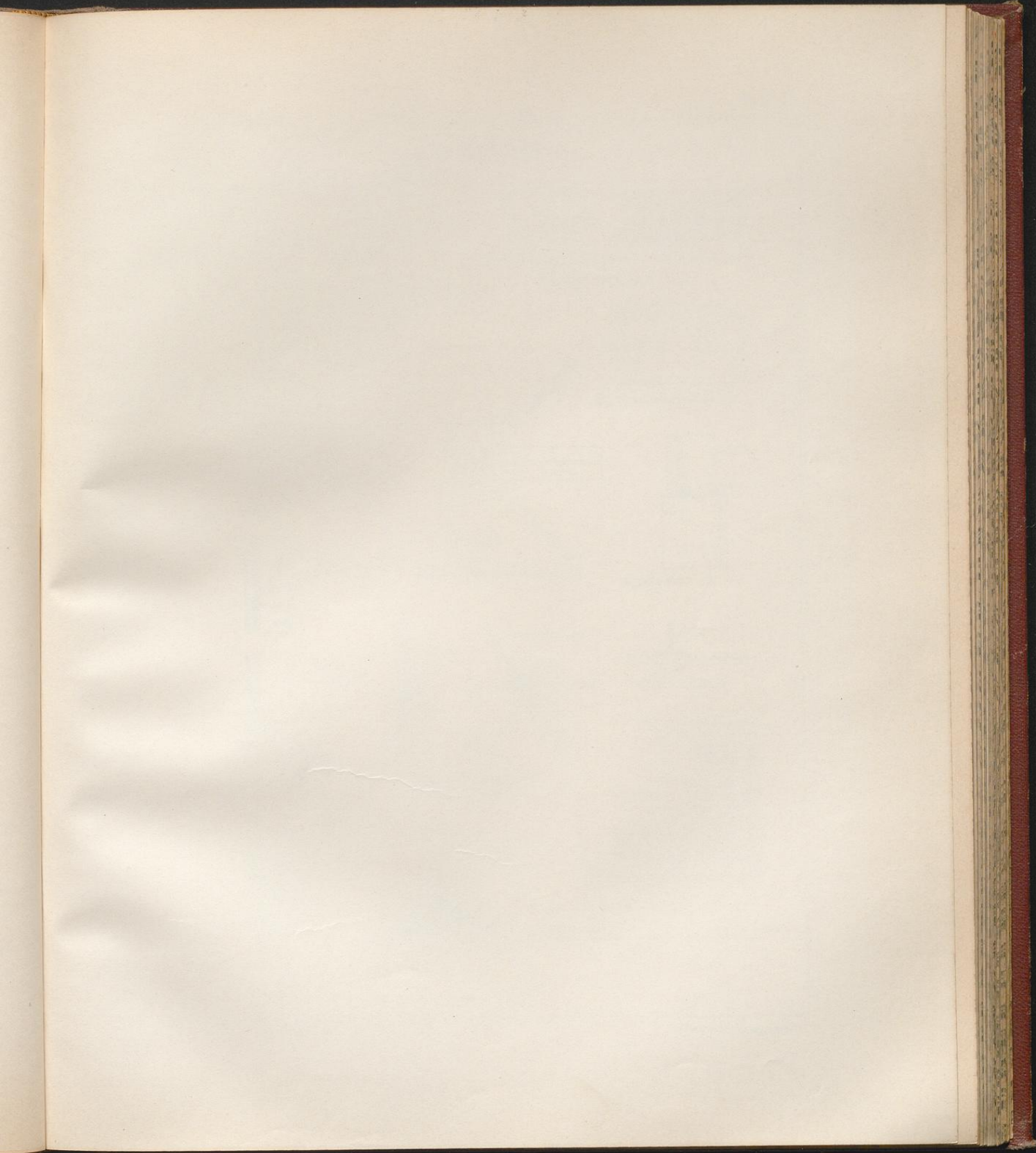
Decke mit Belageisen.



Decke mit Belageisen.







Eiserne Fachwände.

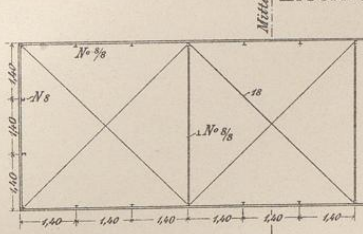


Fig. 1 Grundriss 1:150

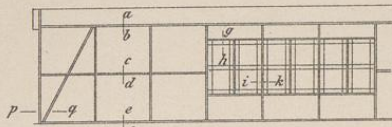


Fig. 2 Längenschnitt 1:150

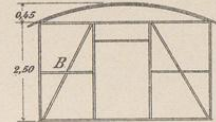


Fig. 3 Giebelansicht 1:150

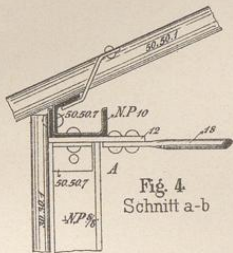


Fig. 4 Schnitt a-b

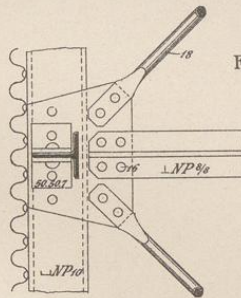


Fig. 5 Knotenpunkt A von Unten

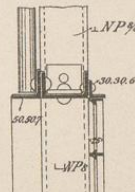


Fig. 10 Schnitt g-h

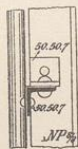


Fig. 6 Schnitt c-d

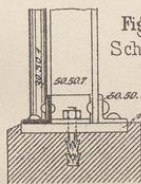
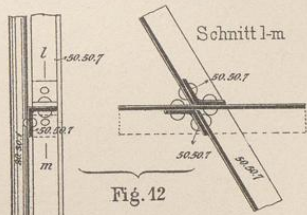


Fig. 7 Schnitt e-f



Knotenpunkt der Strebe bei B (Fig. 3)



Fig. 11 Schnitt i-k

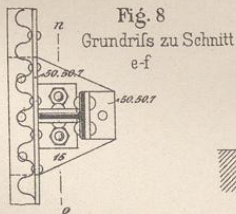


Fig. 8 Grundriss zu Schnitt e-f

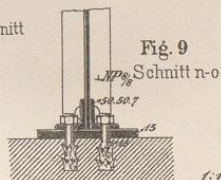


Fig. 9 Schnitt n-o

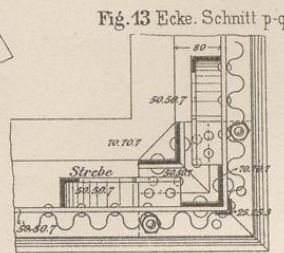
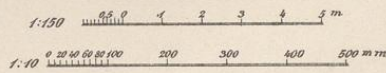
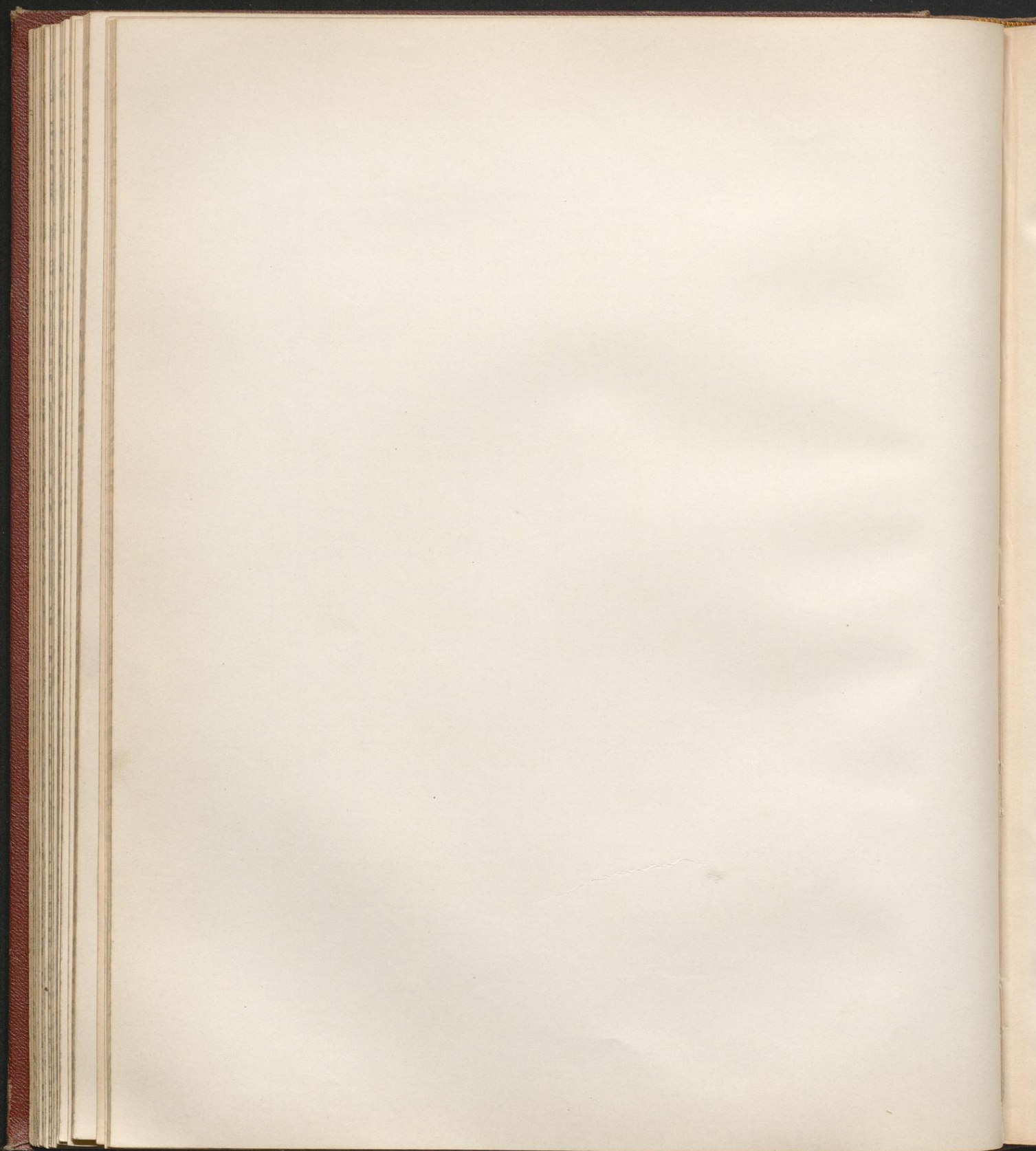
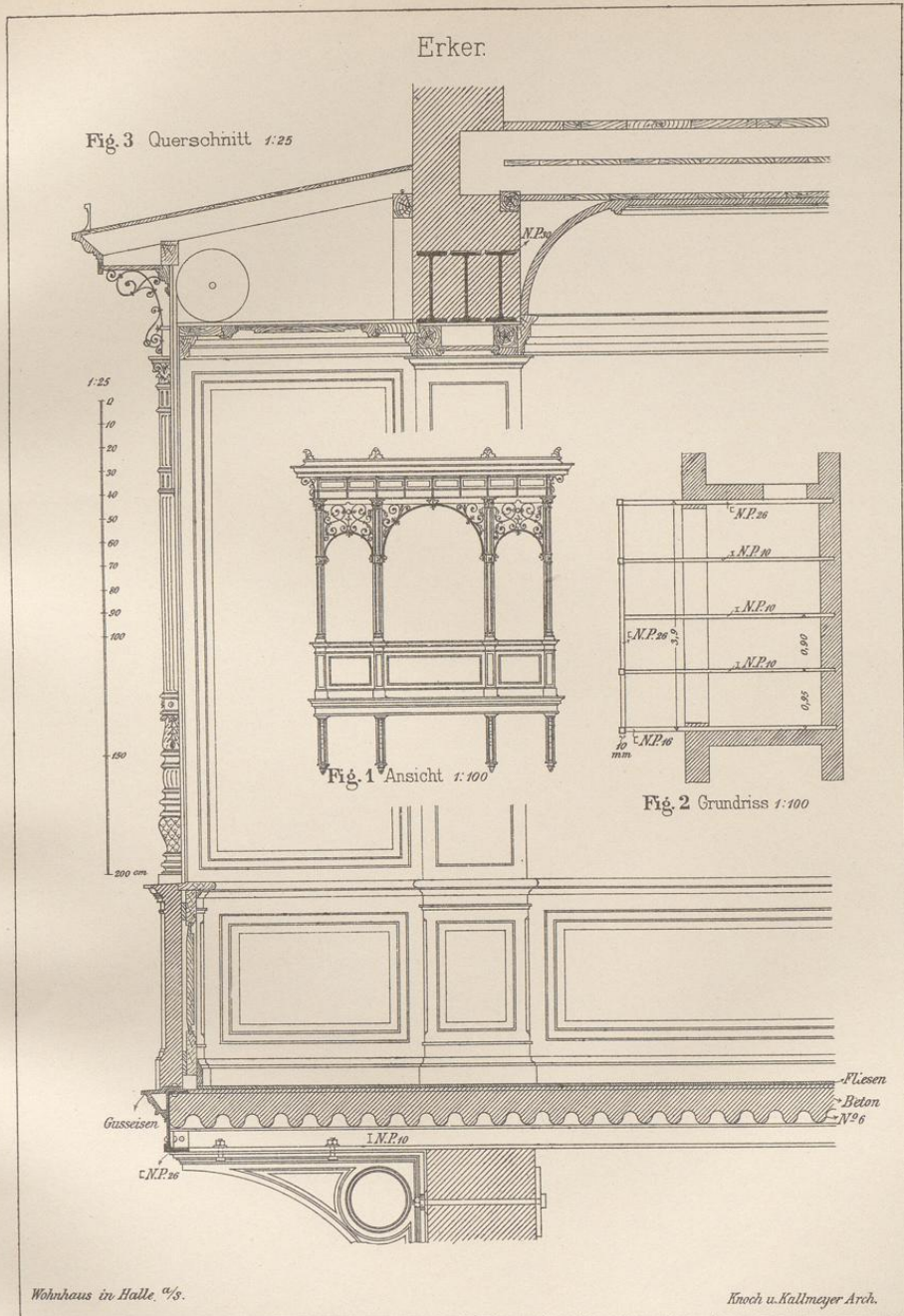


Fig. 13 Ecke. Schnitt p-q



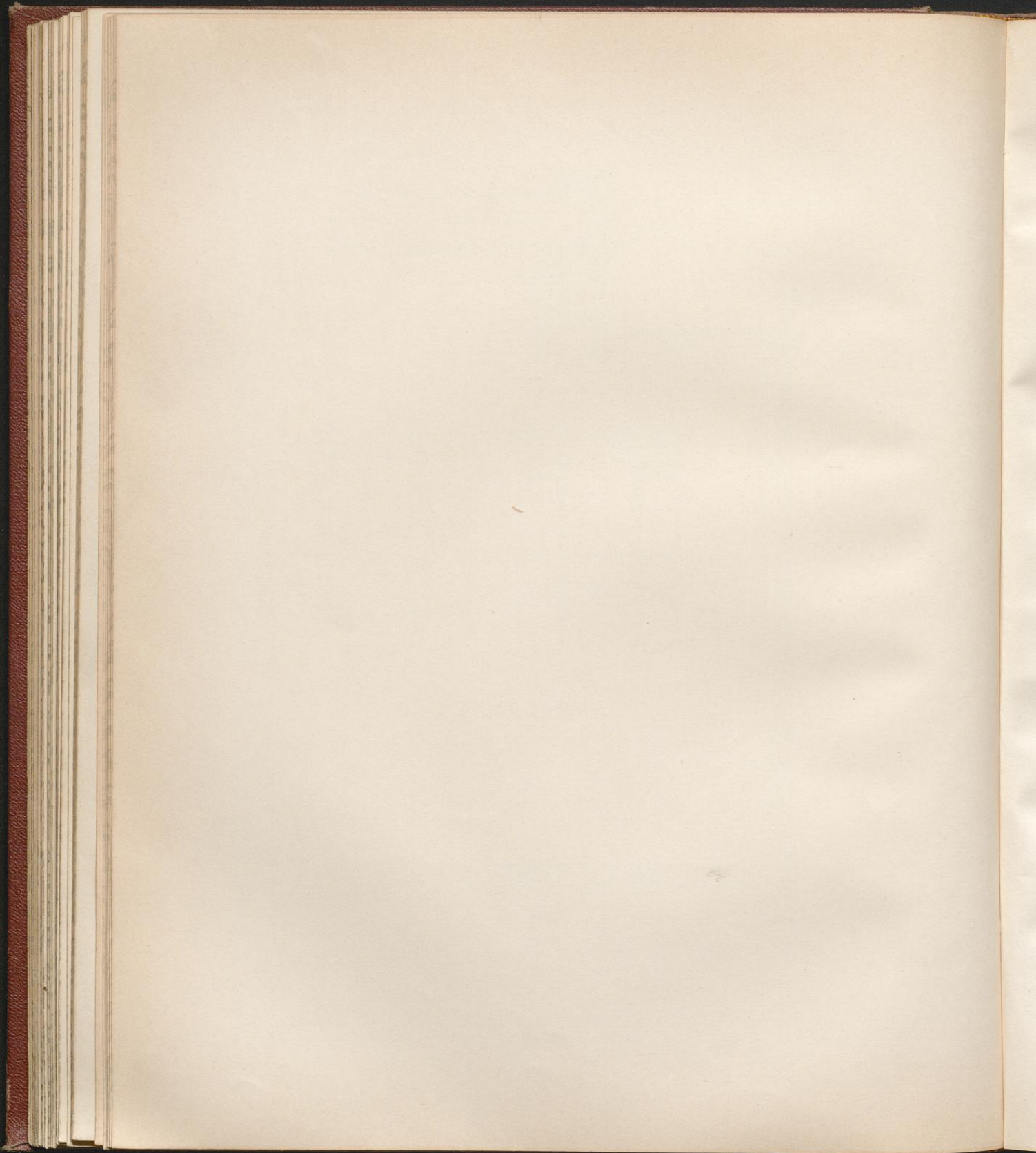


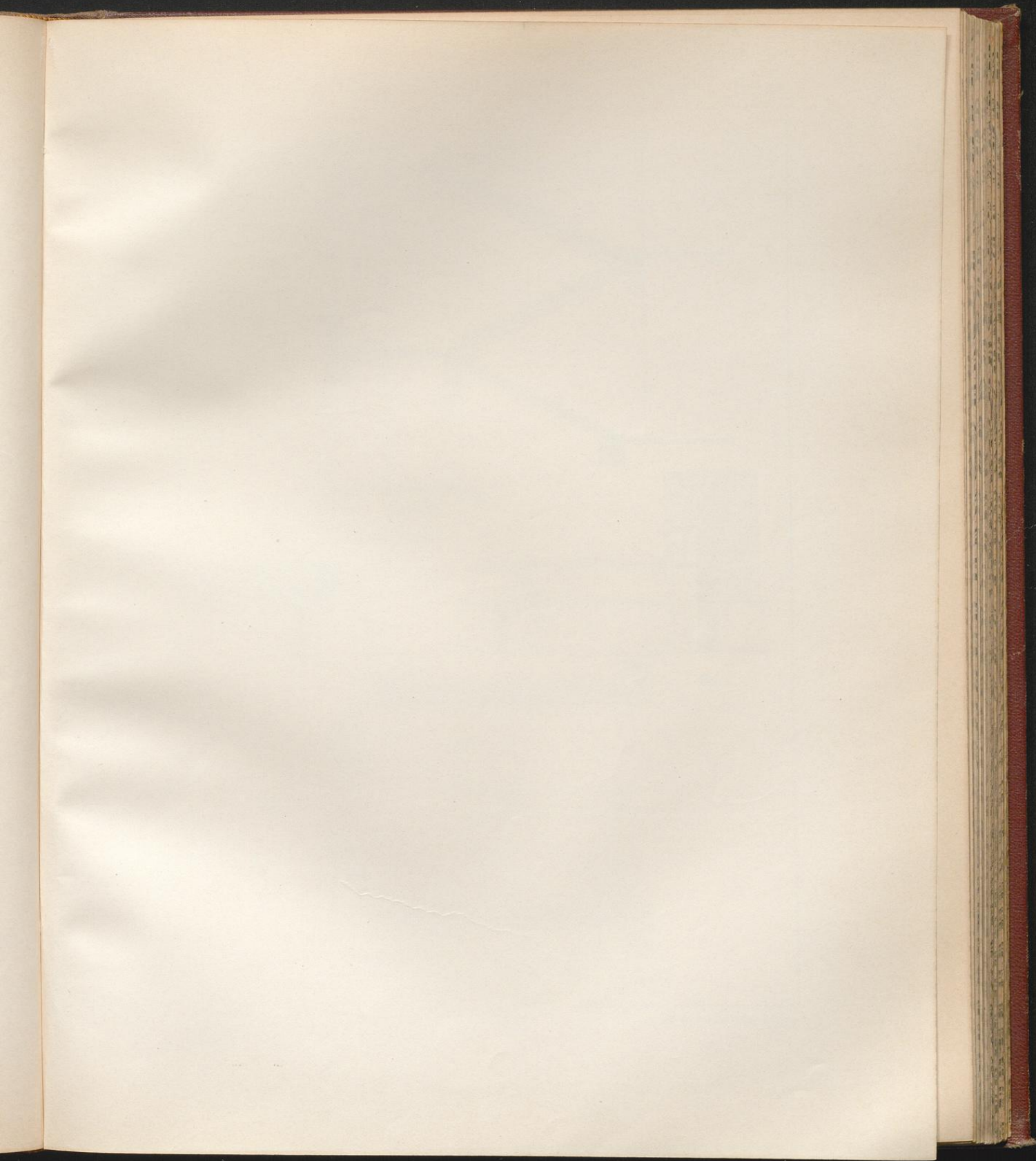


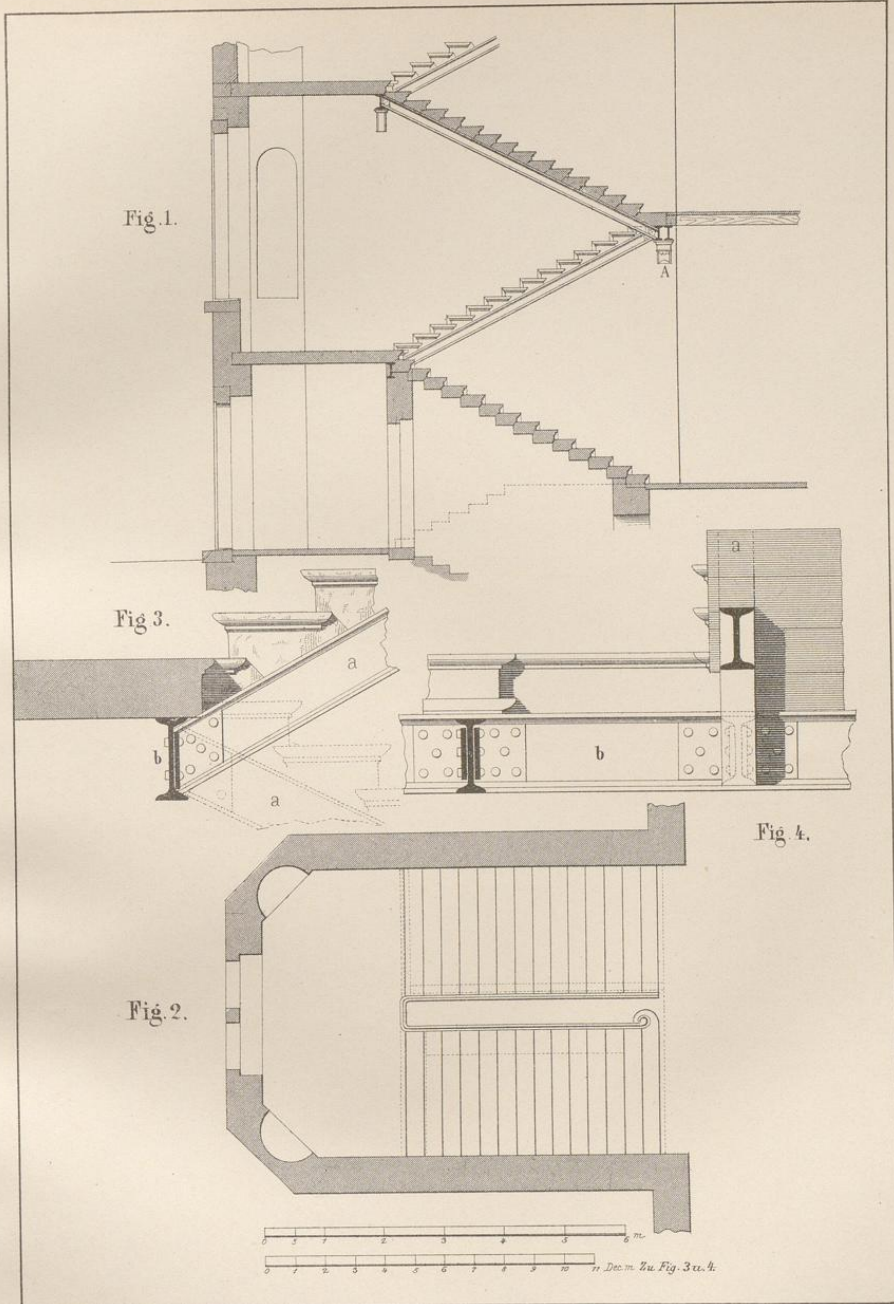


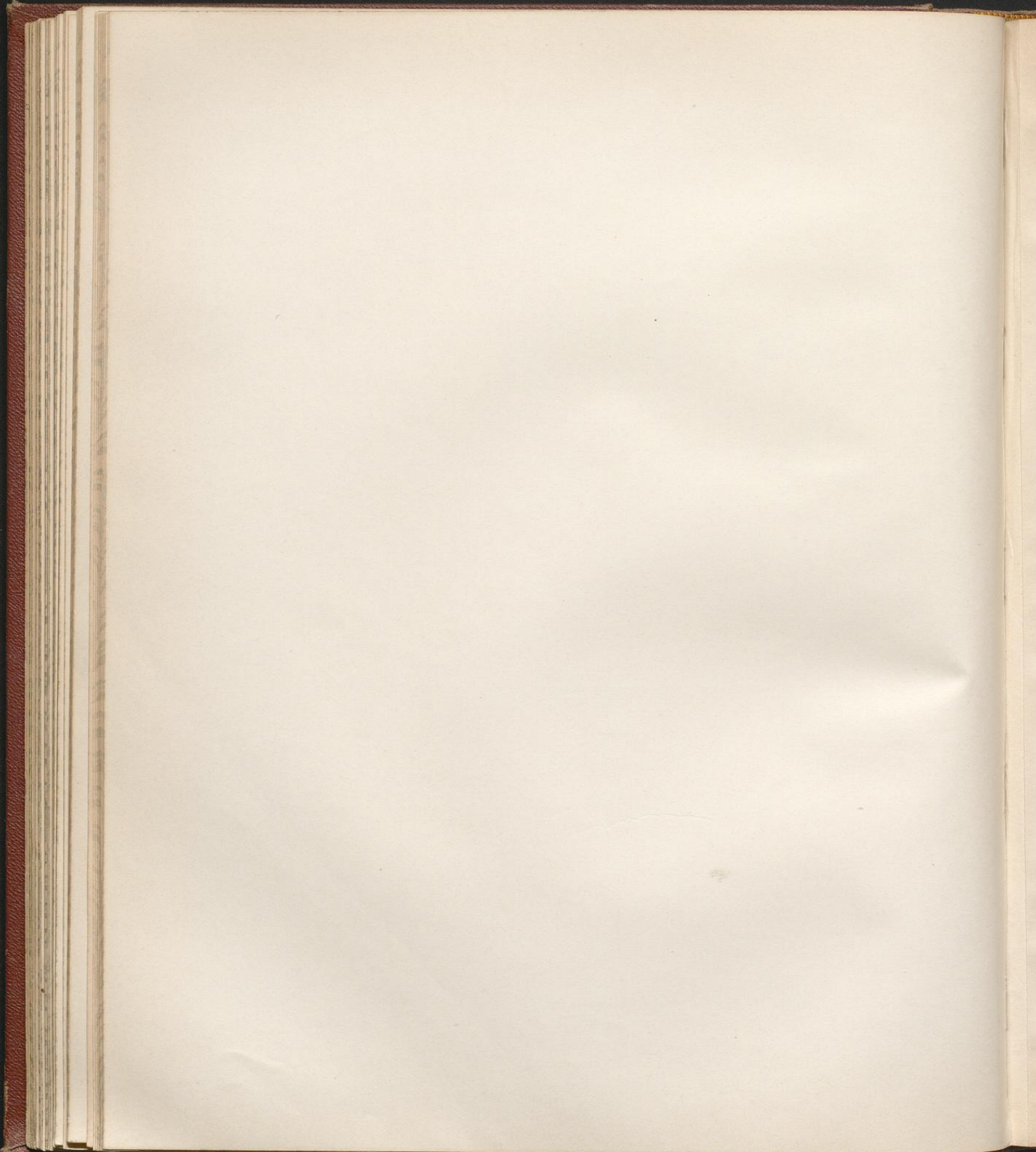
Breymann III Eisen. (6. Aufl.)

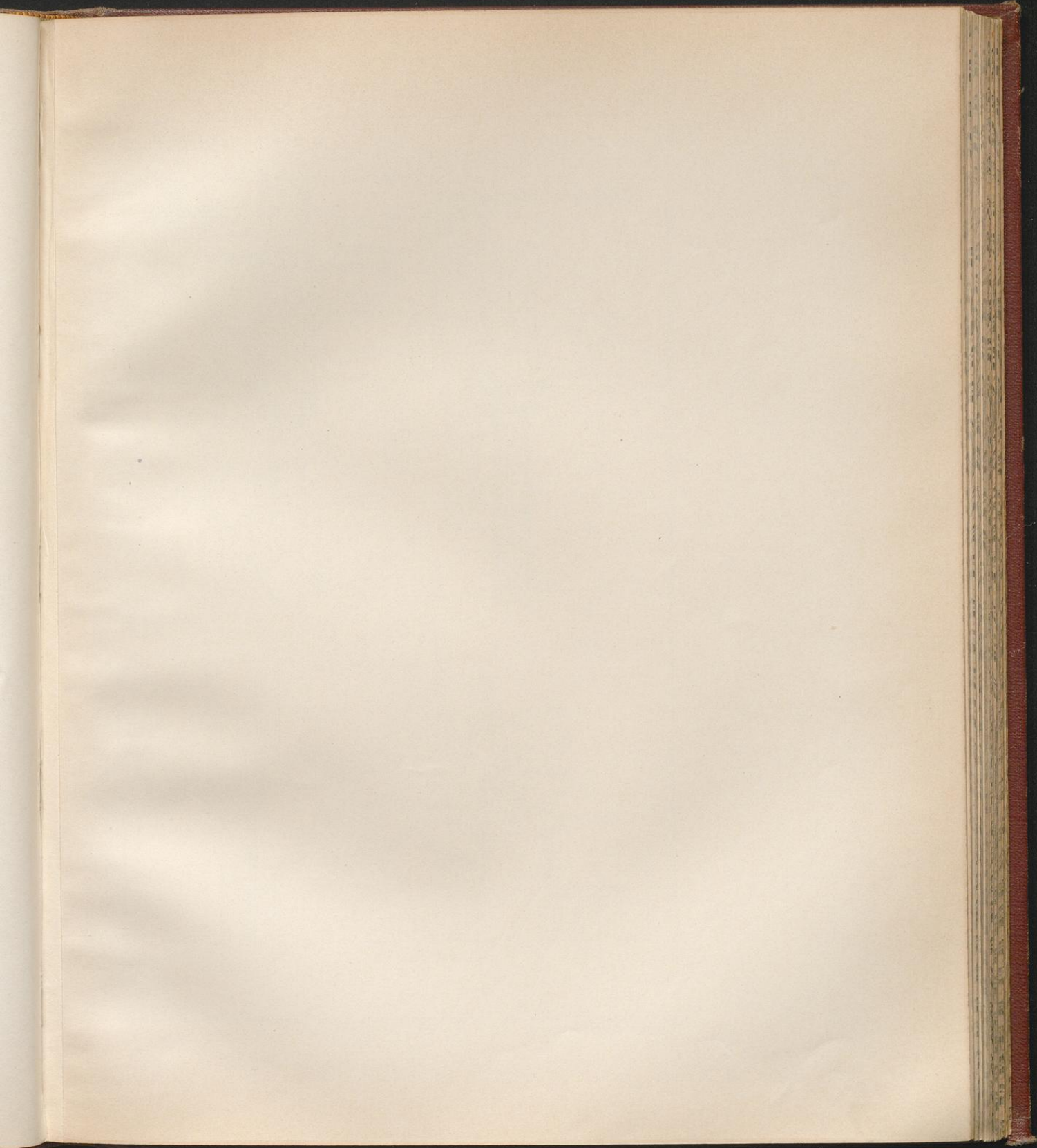
J.M. Gebhardt's Verlag, Leipzig.











Treppe der Leibniz-Realschule in Hannover.

Fig. 2 Anschluss der Träger an Säule I

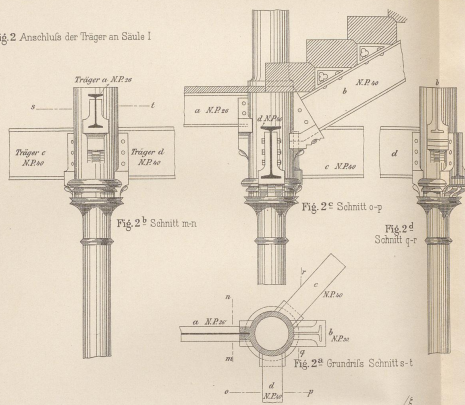


Fig. 3 Anschluss der Träger an Säule II

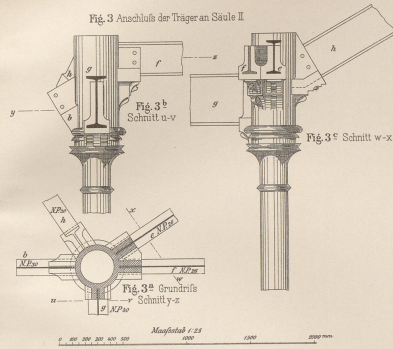


Fig. 4 Anschluss der Träger an Säule III

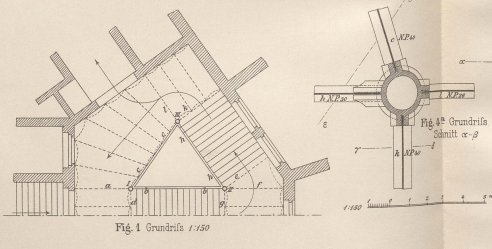
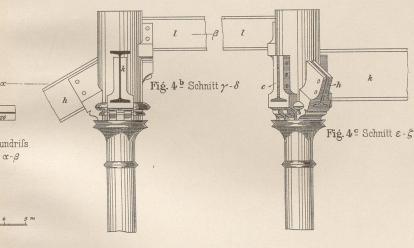
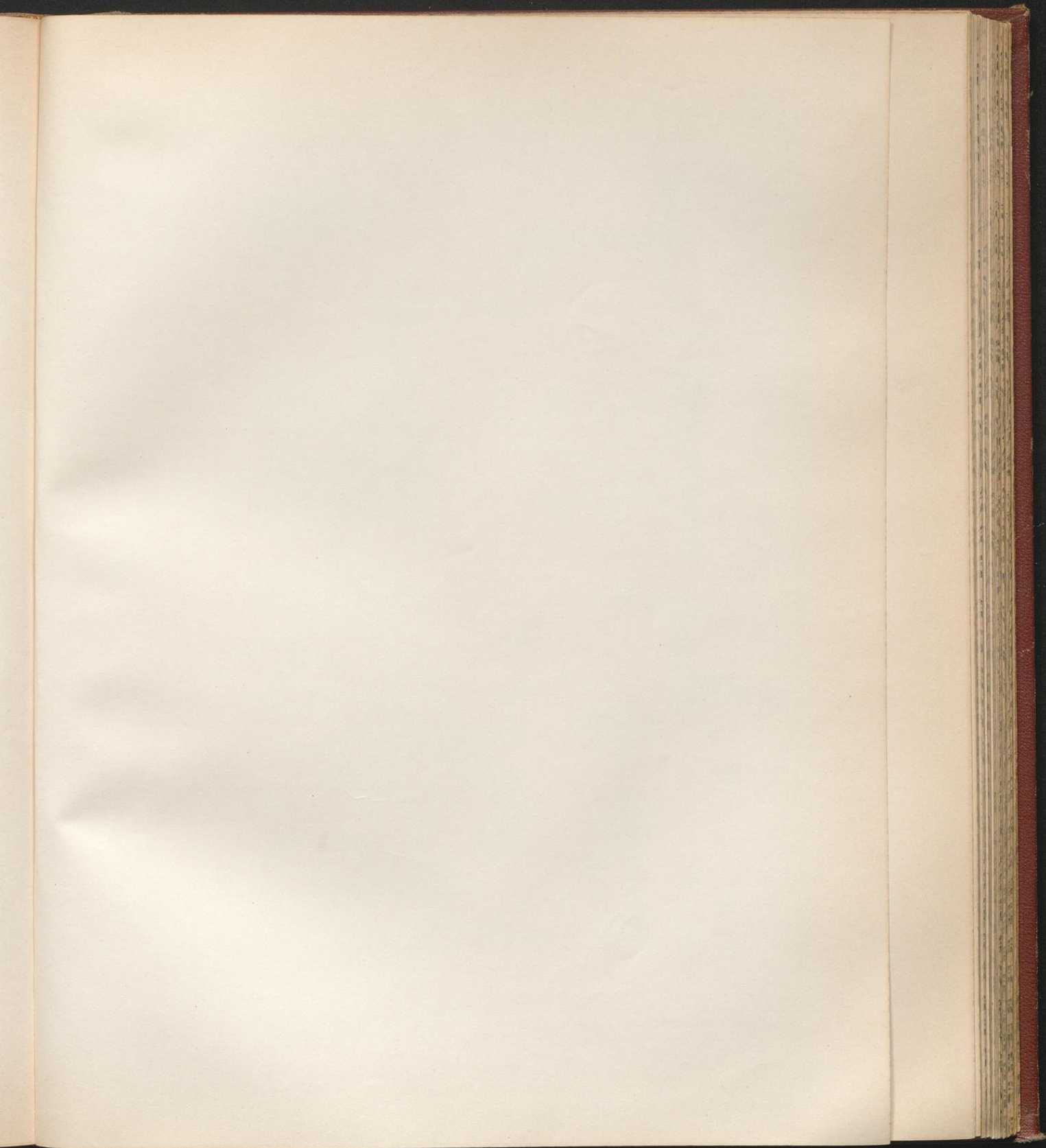
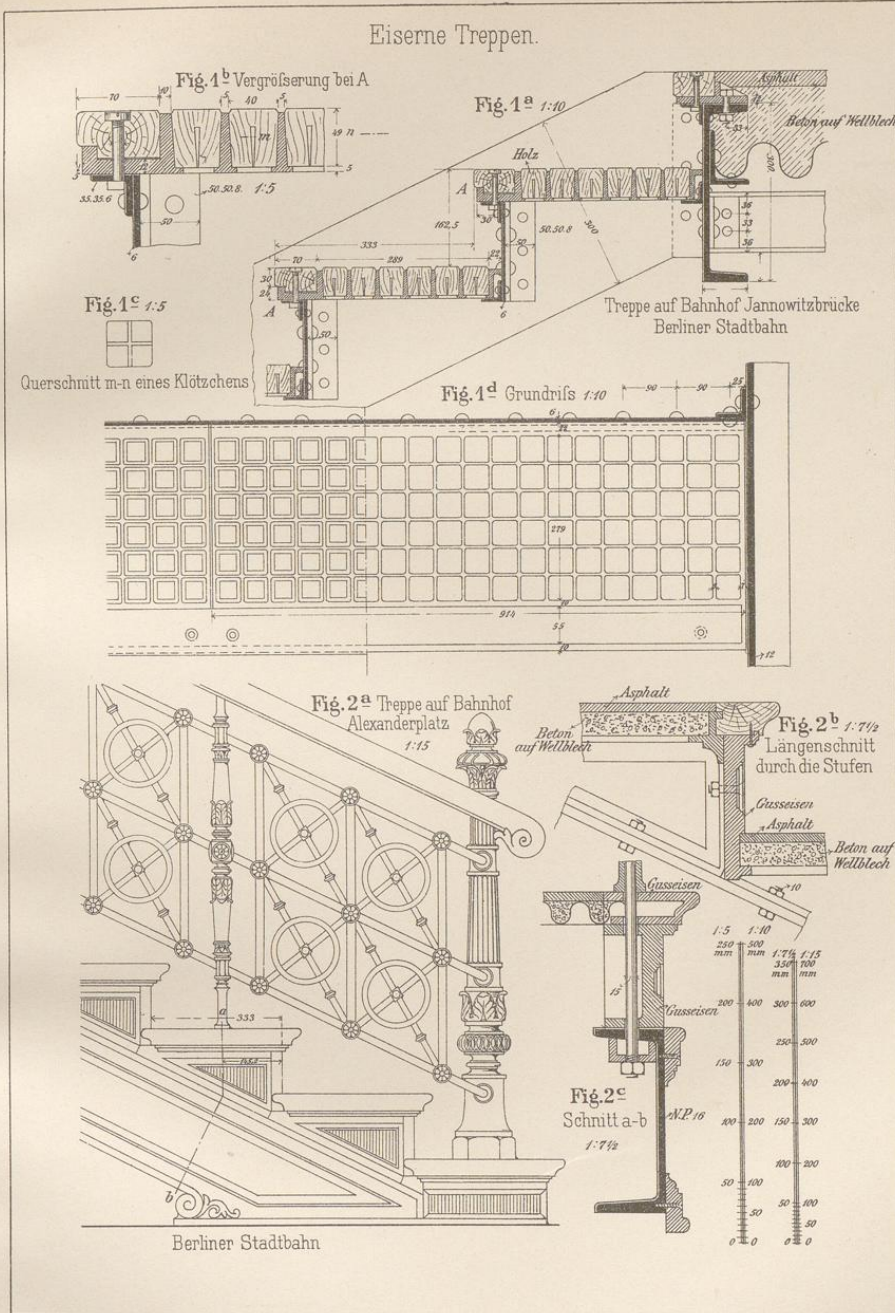
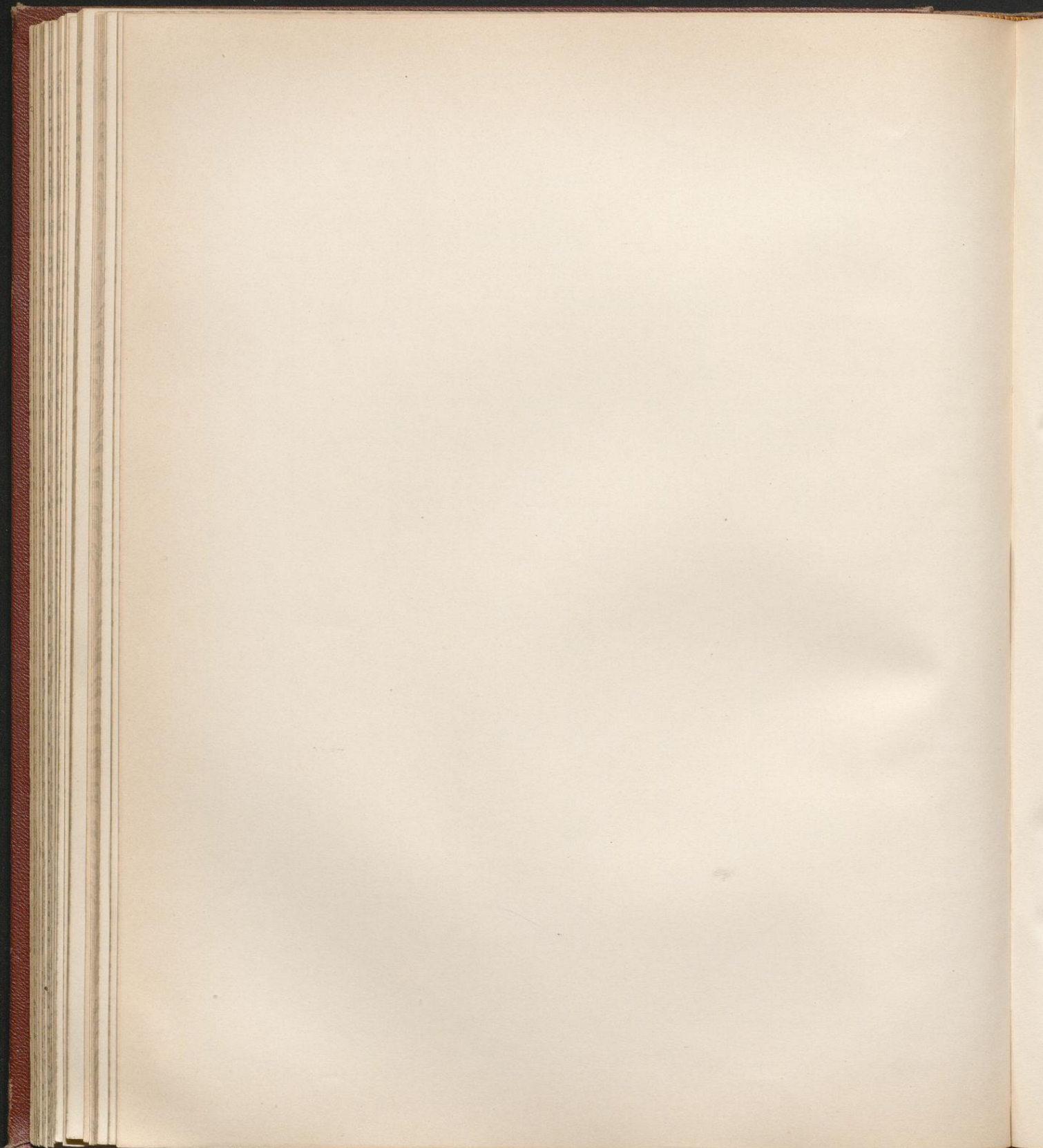


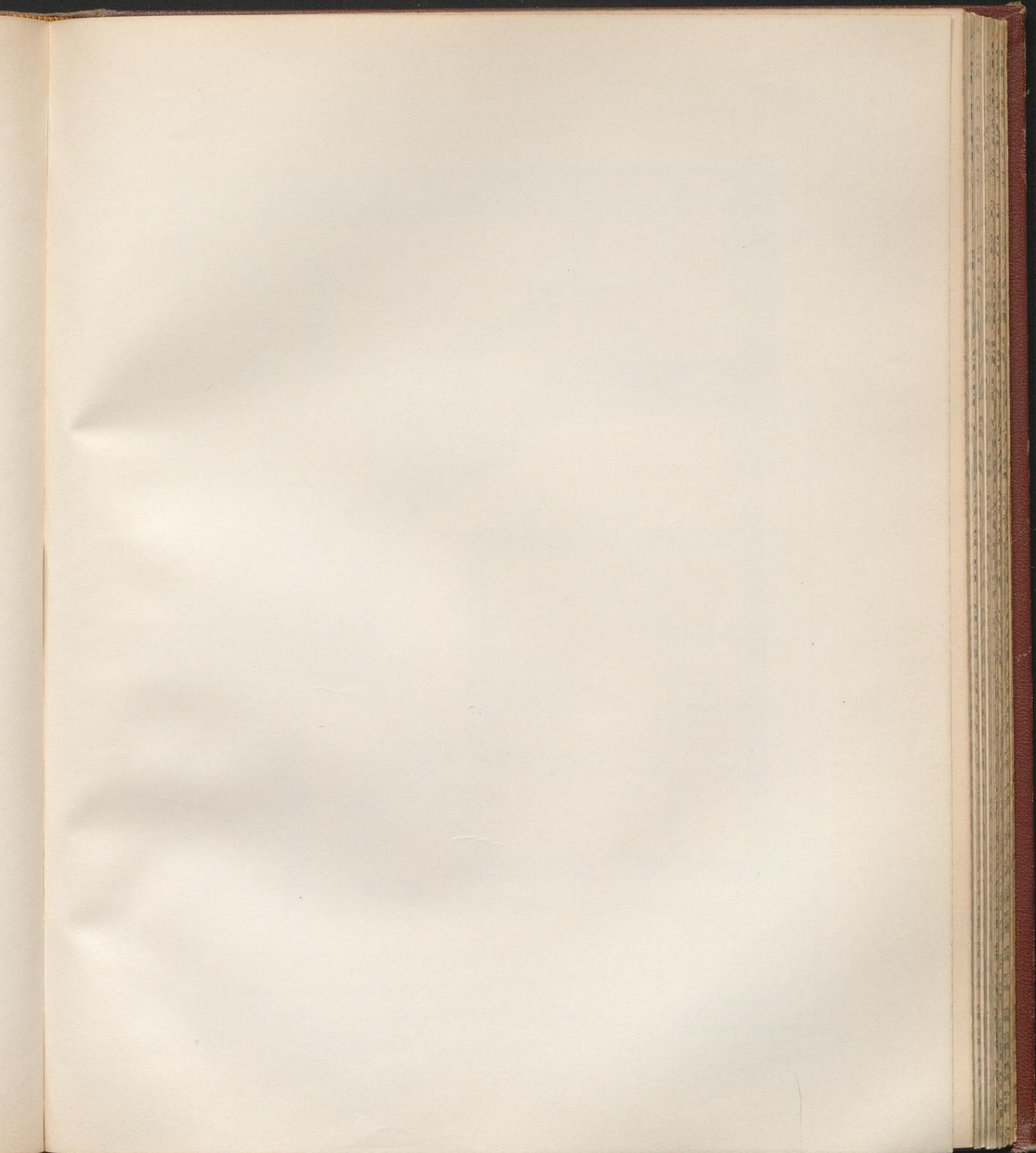
Fig. 1 Grundriss 1:150

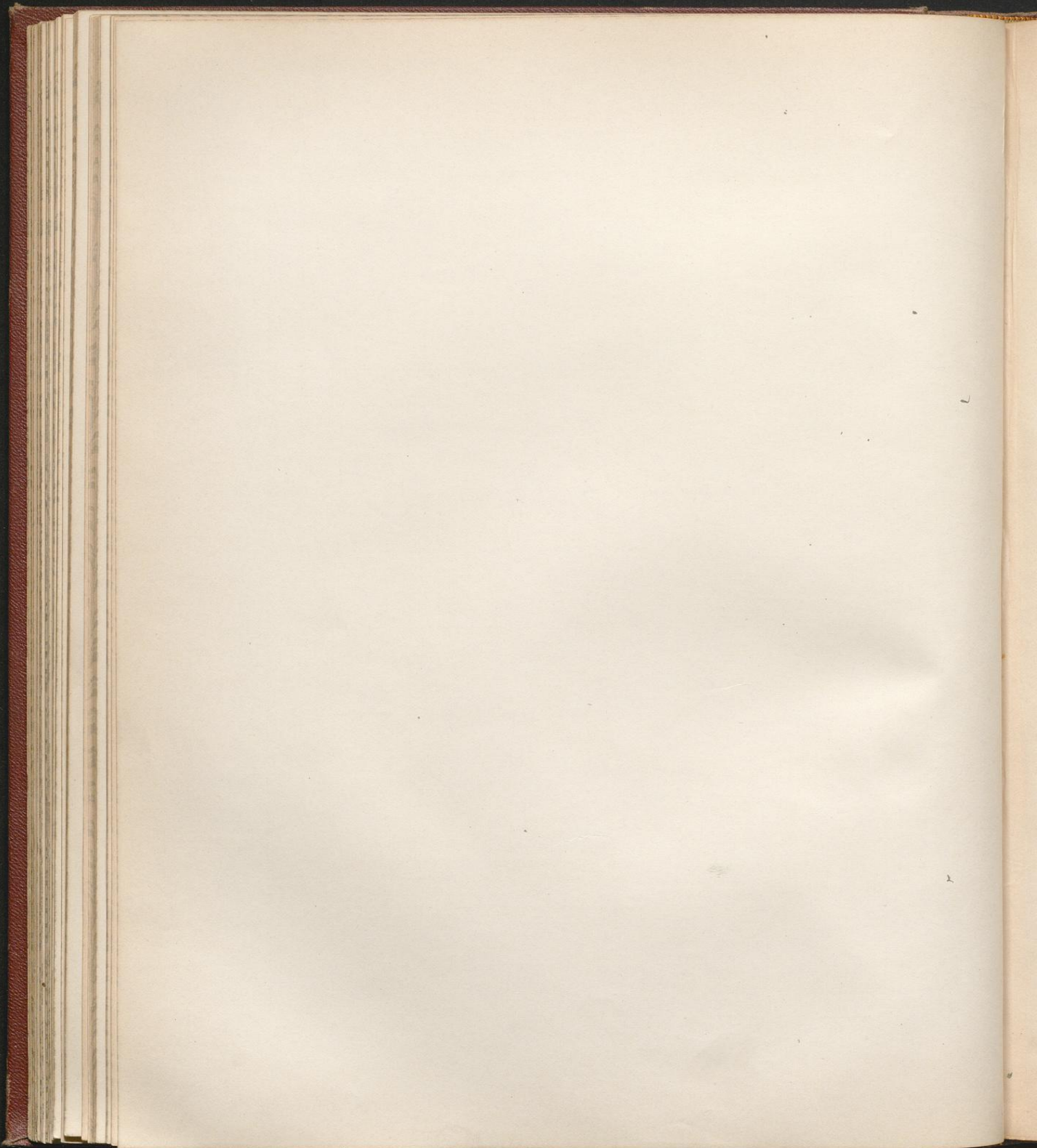


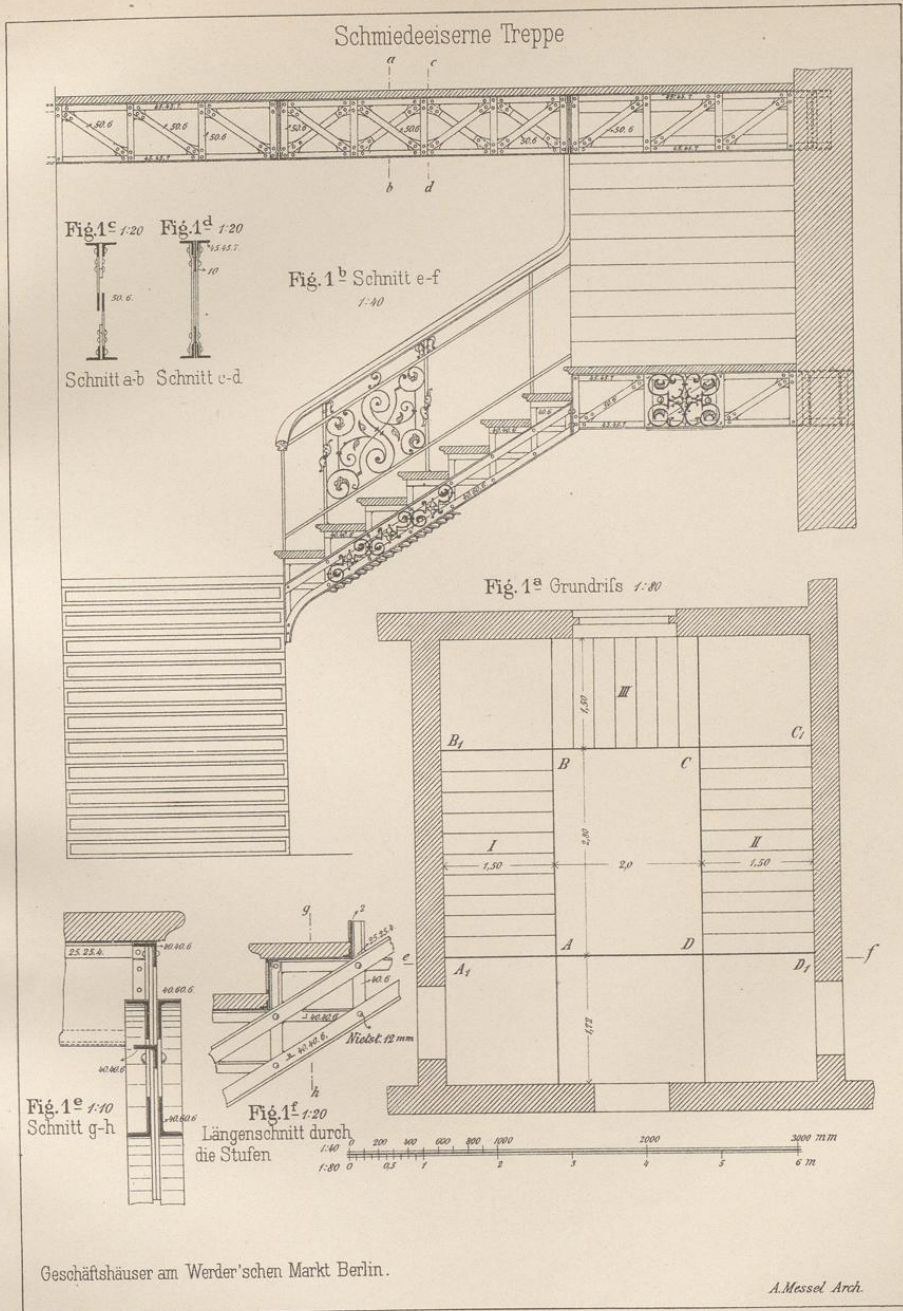
Eiserne Treppen.

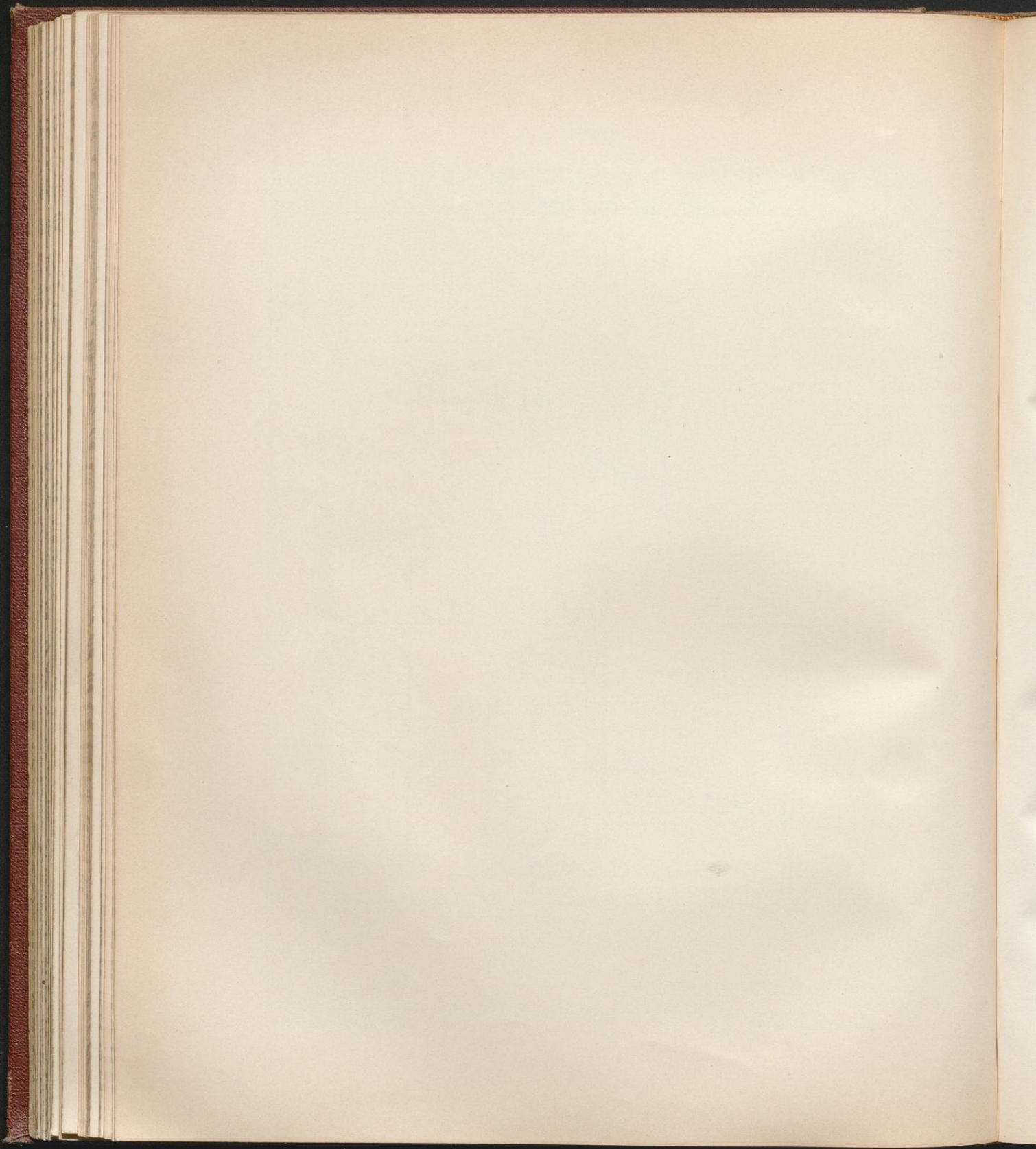


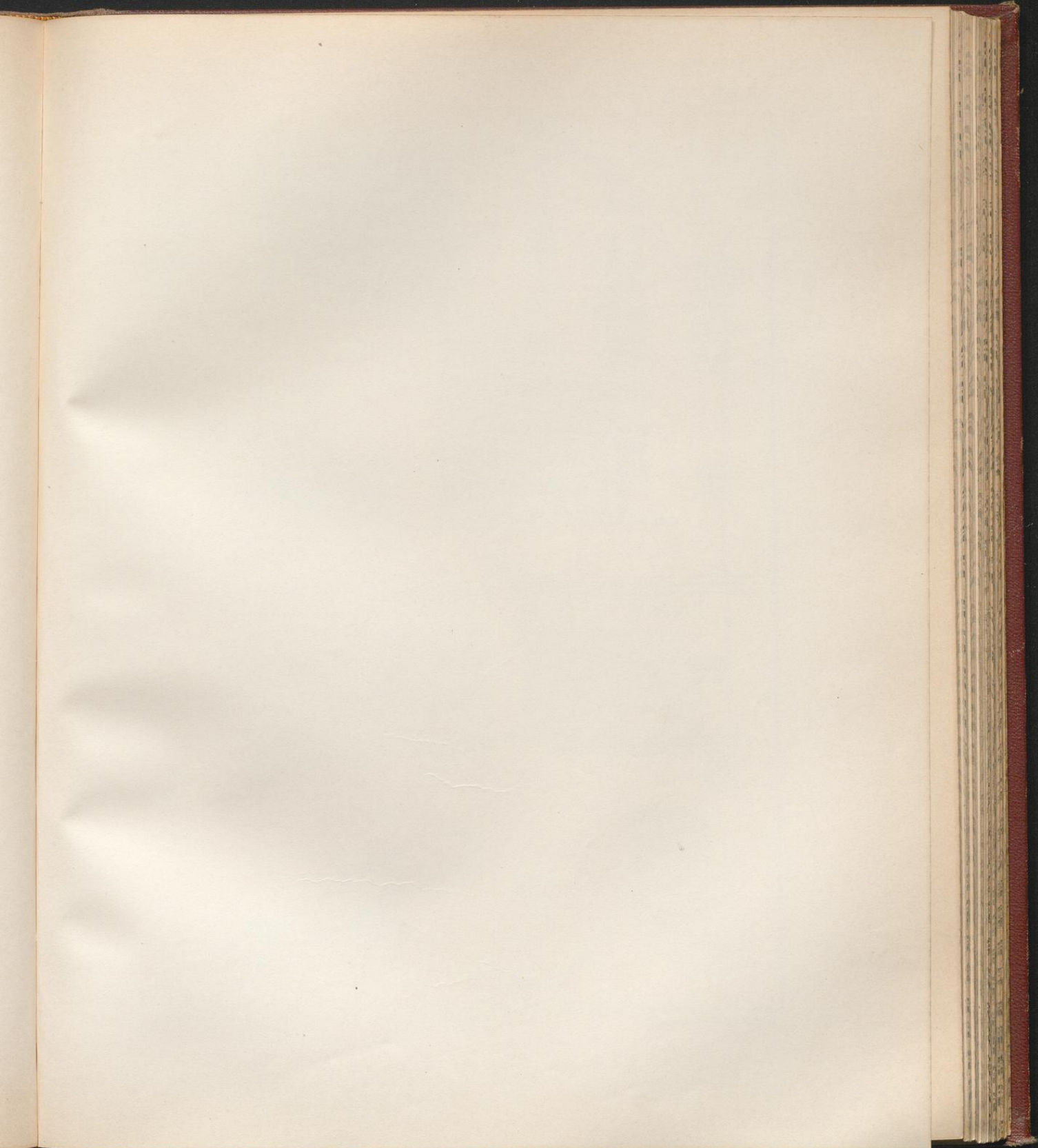


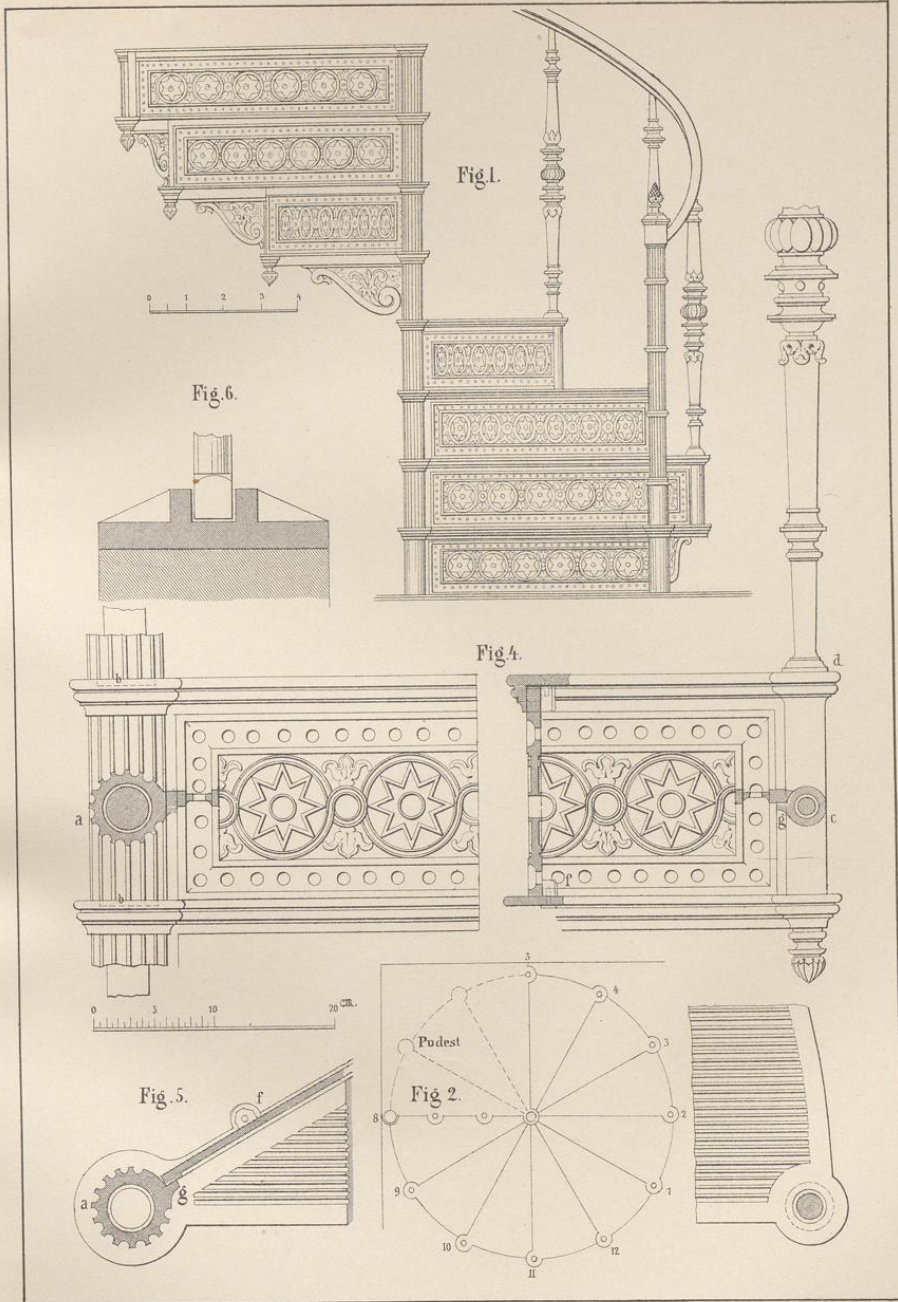






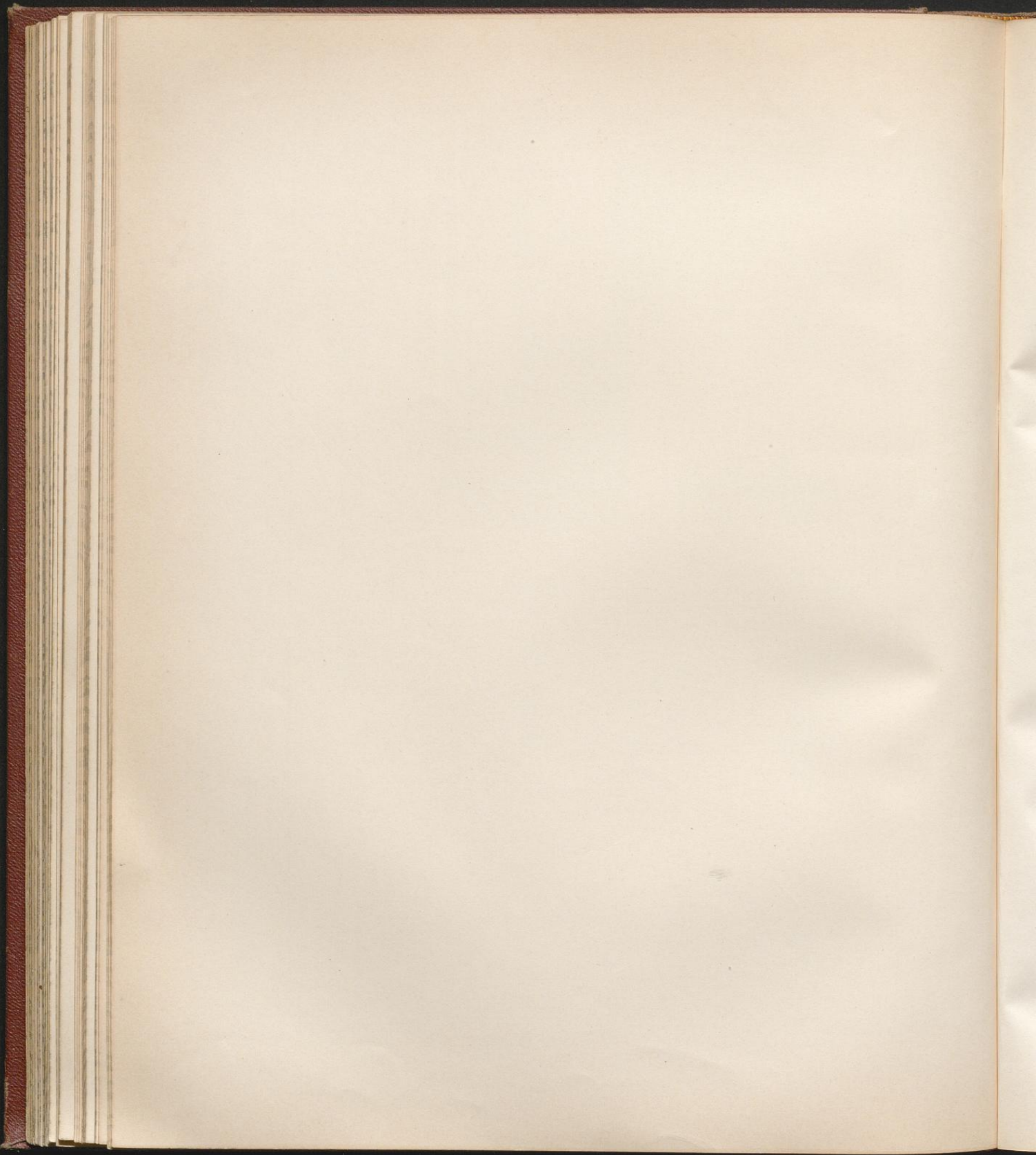


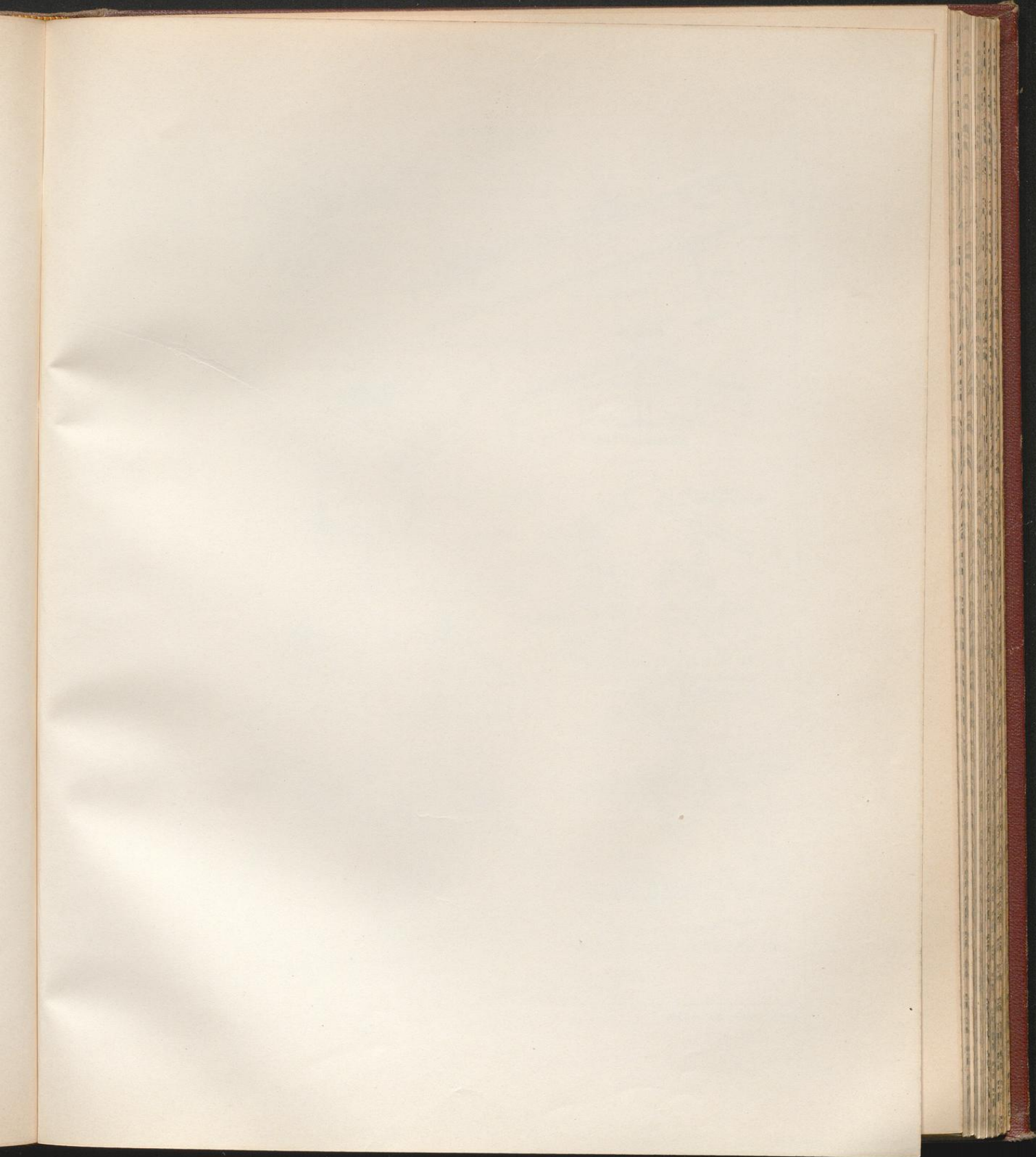


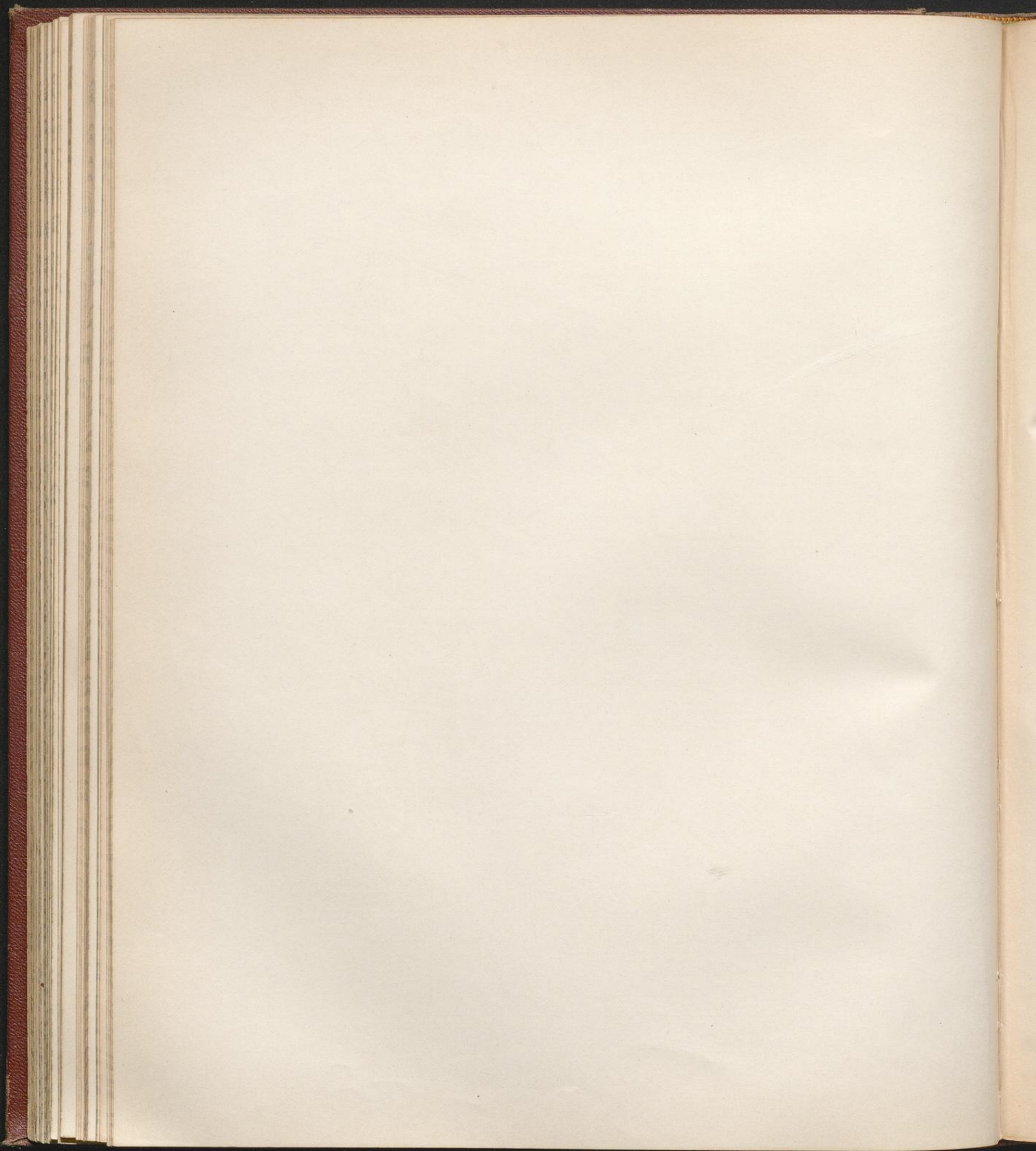


Breymann III Eisen (6. Aufl.)

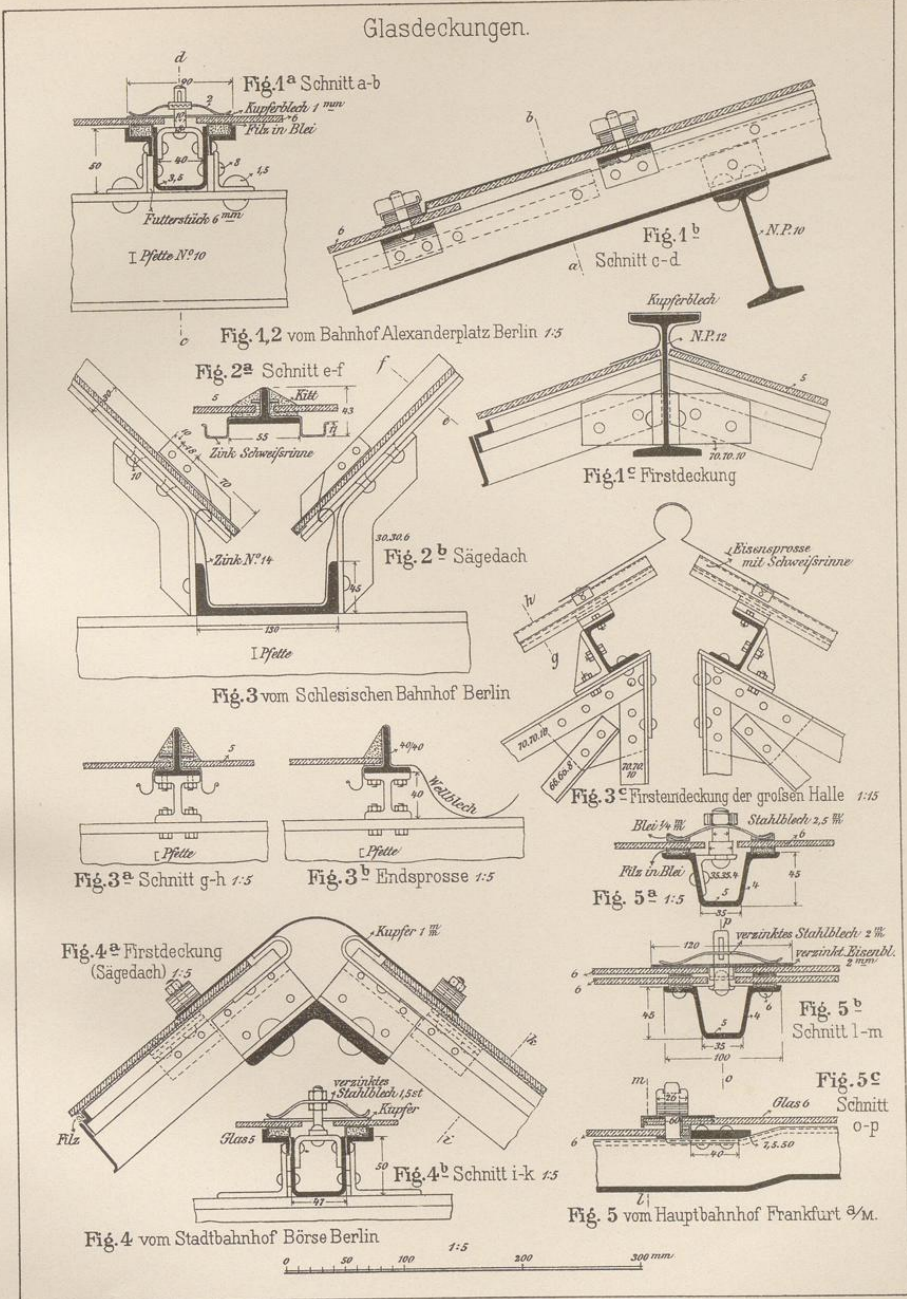
J.M. Gebhardt's Verlag, Leipzig.

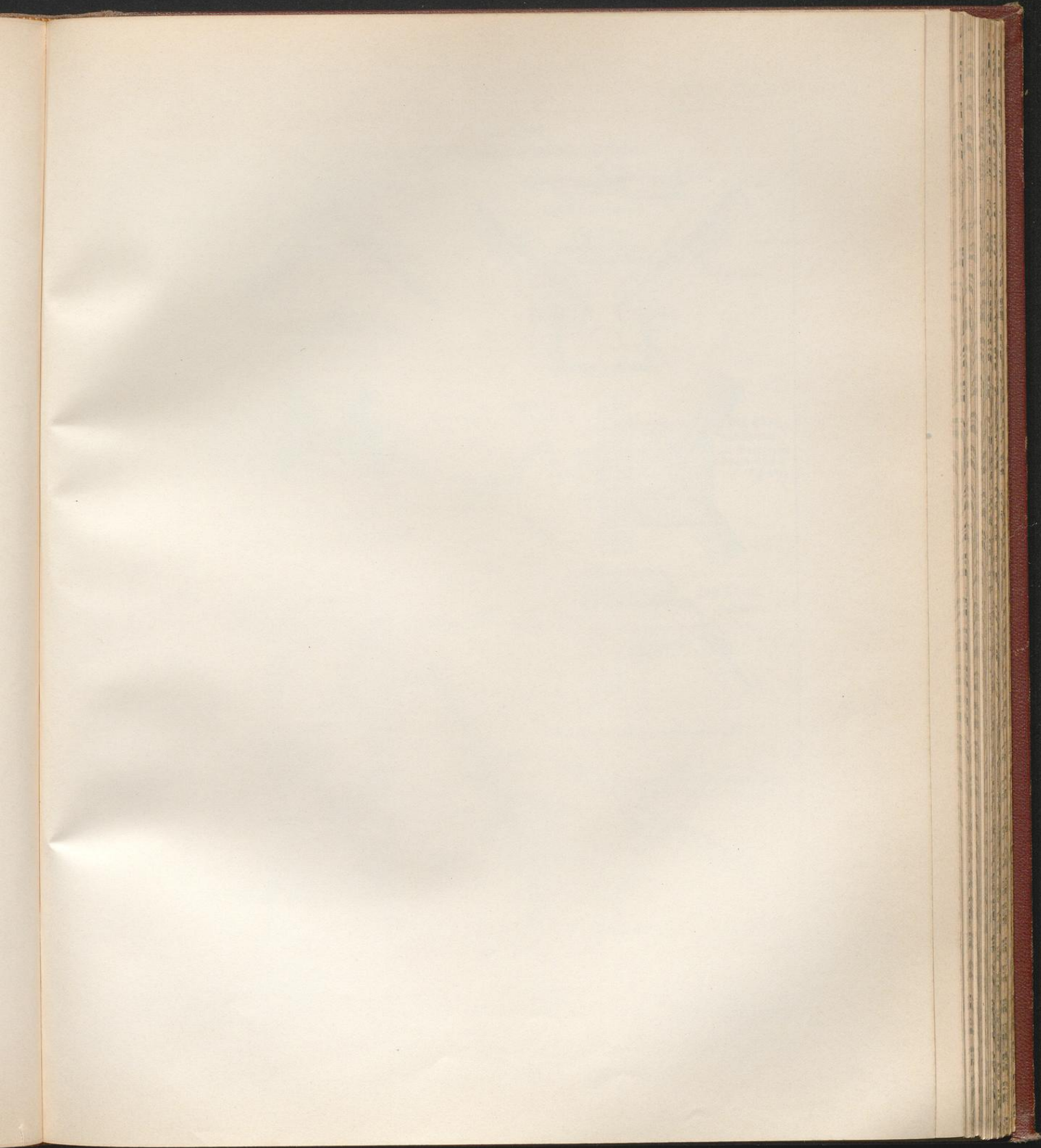


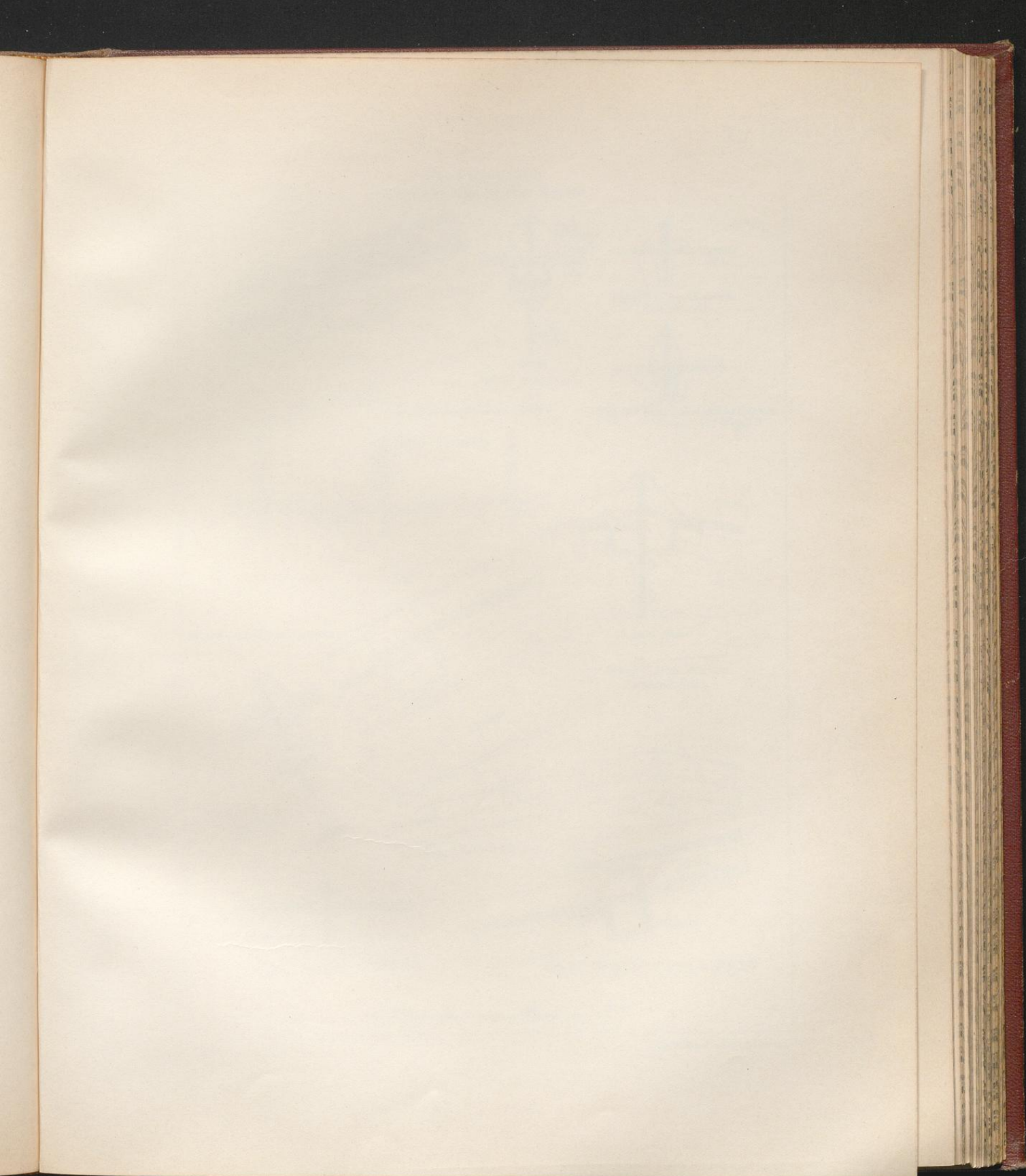


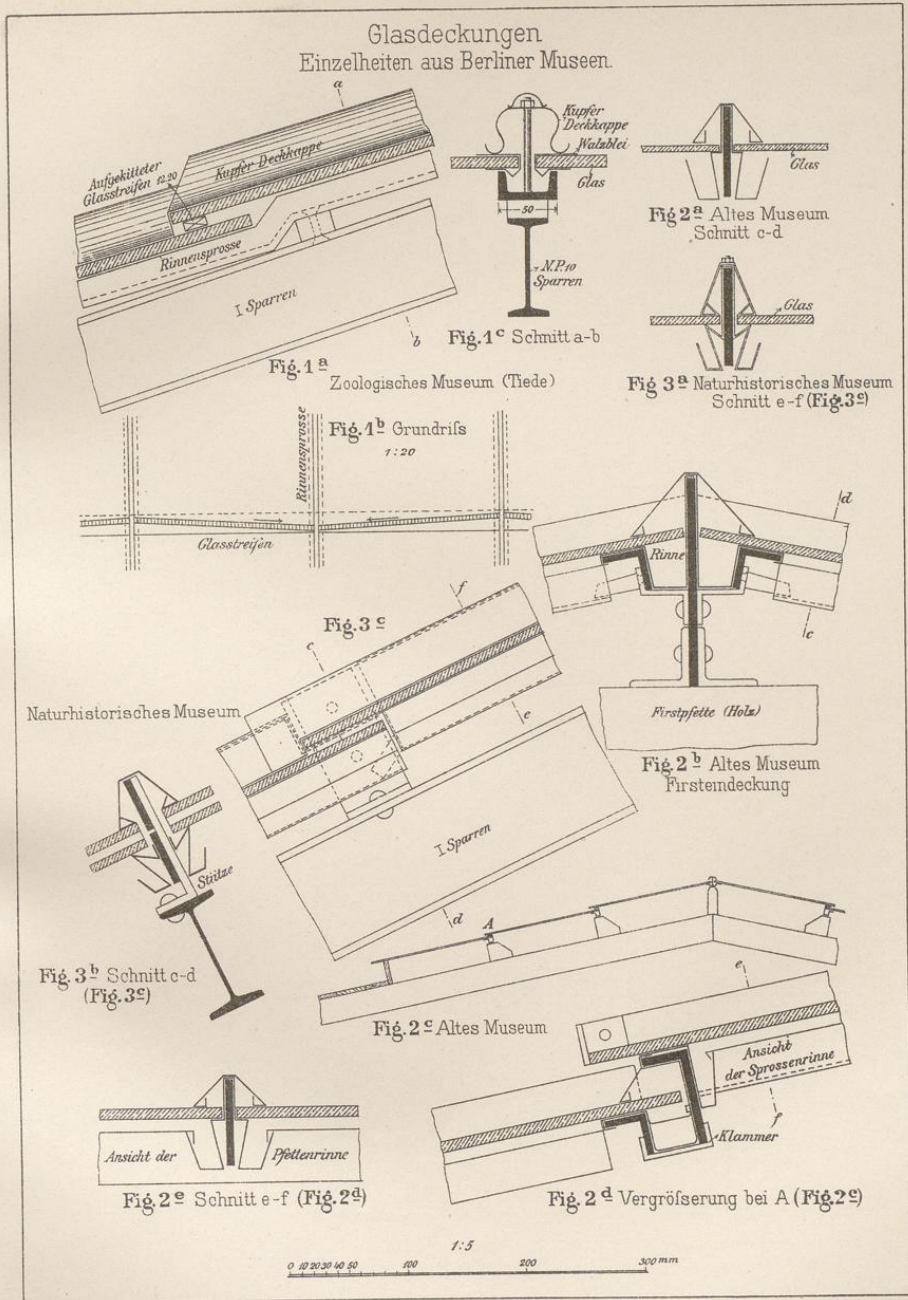


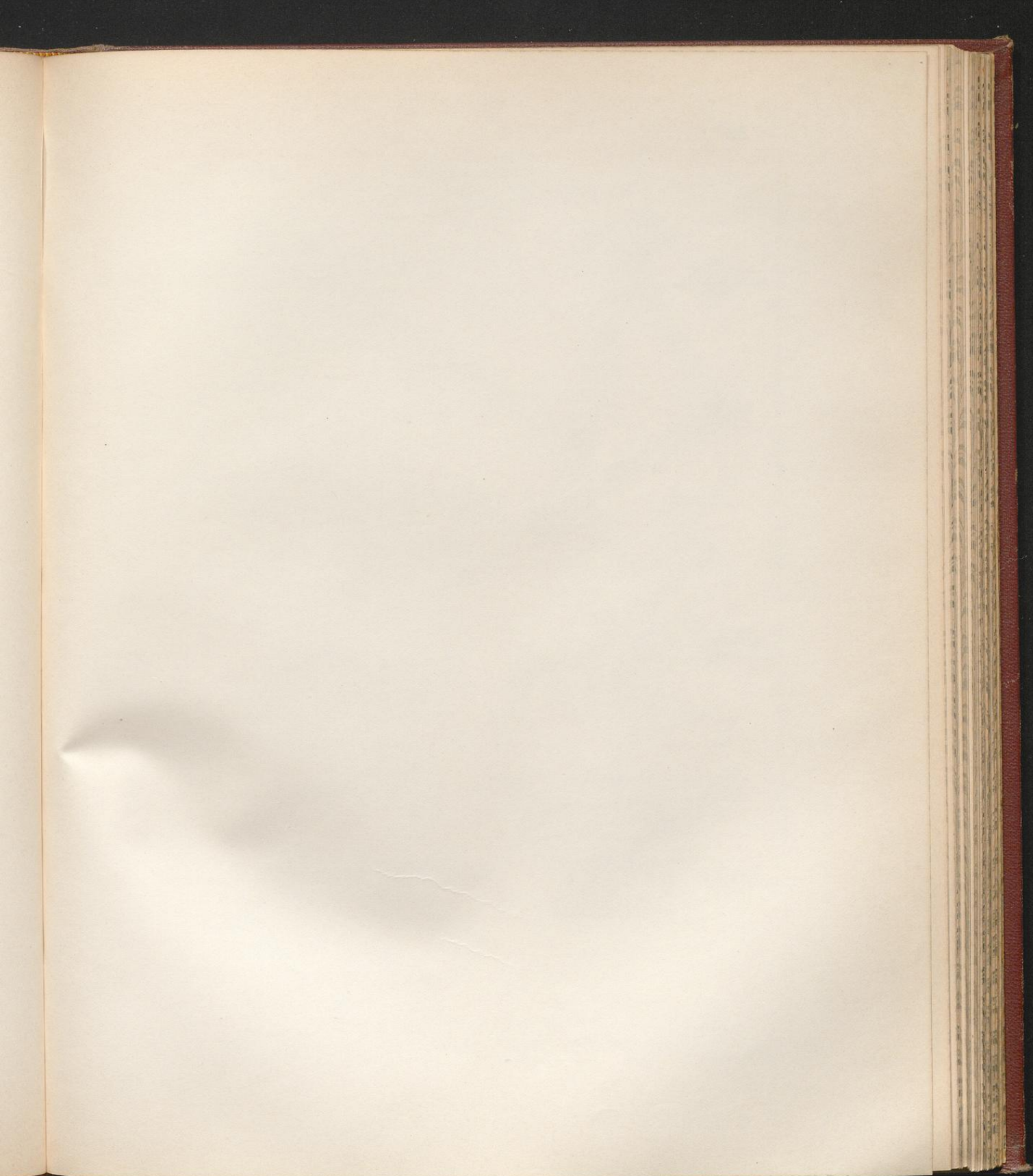
Glasdeckungen.











Glasedeckungen
 Einzelheiten der Hallendächer auf Hauptbahnhof
 Frankfurt $\frac{3}{4}$ M.

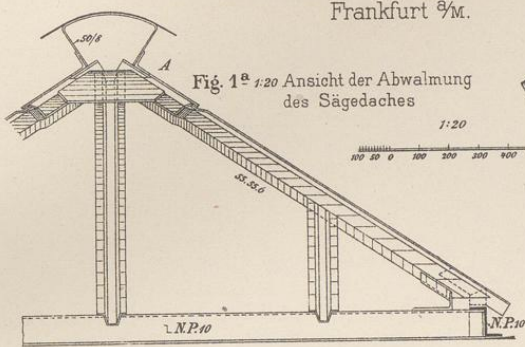


Fig. 1^a 1:20 Ansicht der Abwalmung
 des Sägedaches

1:20

100 50 0 100 200 300 400 500 mm

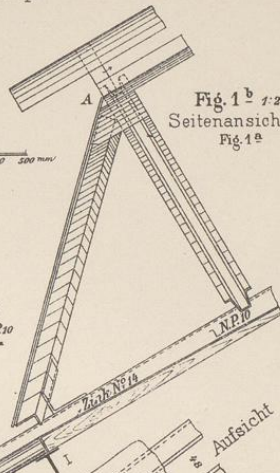


Fig. 1^b 1:20
 Seitenansicht zu
 Fig. 1^a

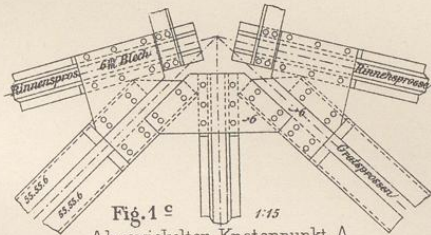


Fig. 1^c 1:15
 Abgewickelter Knotenpunkt A

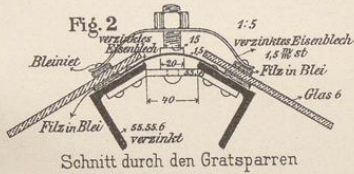


Fig. 2 1:5
 Schnitt durch den Gratsparren

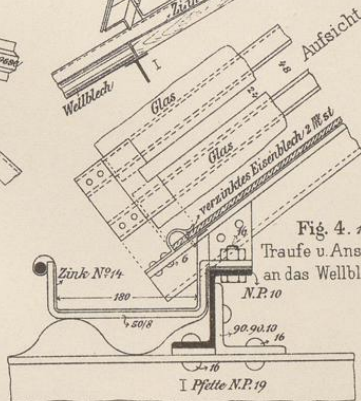


Fig. 4. 1:7,5
 Traufe v. Anschluss
 an das Wellblechdach.

N.P. 10

I Pfette N.P. 19

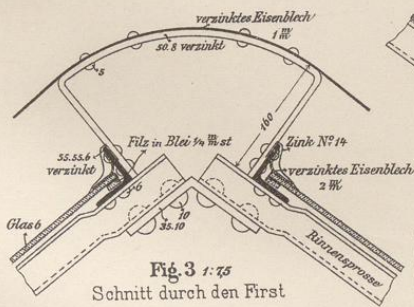


Fig. 3 1:75
 Schnitt durch den First

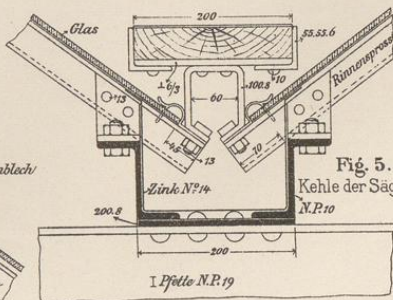


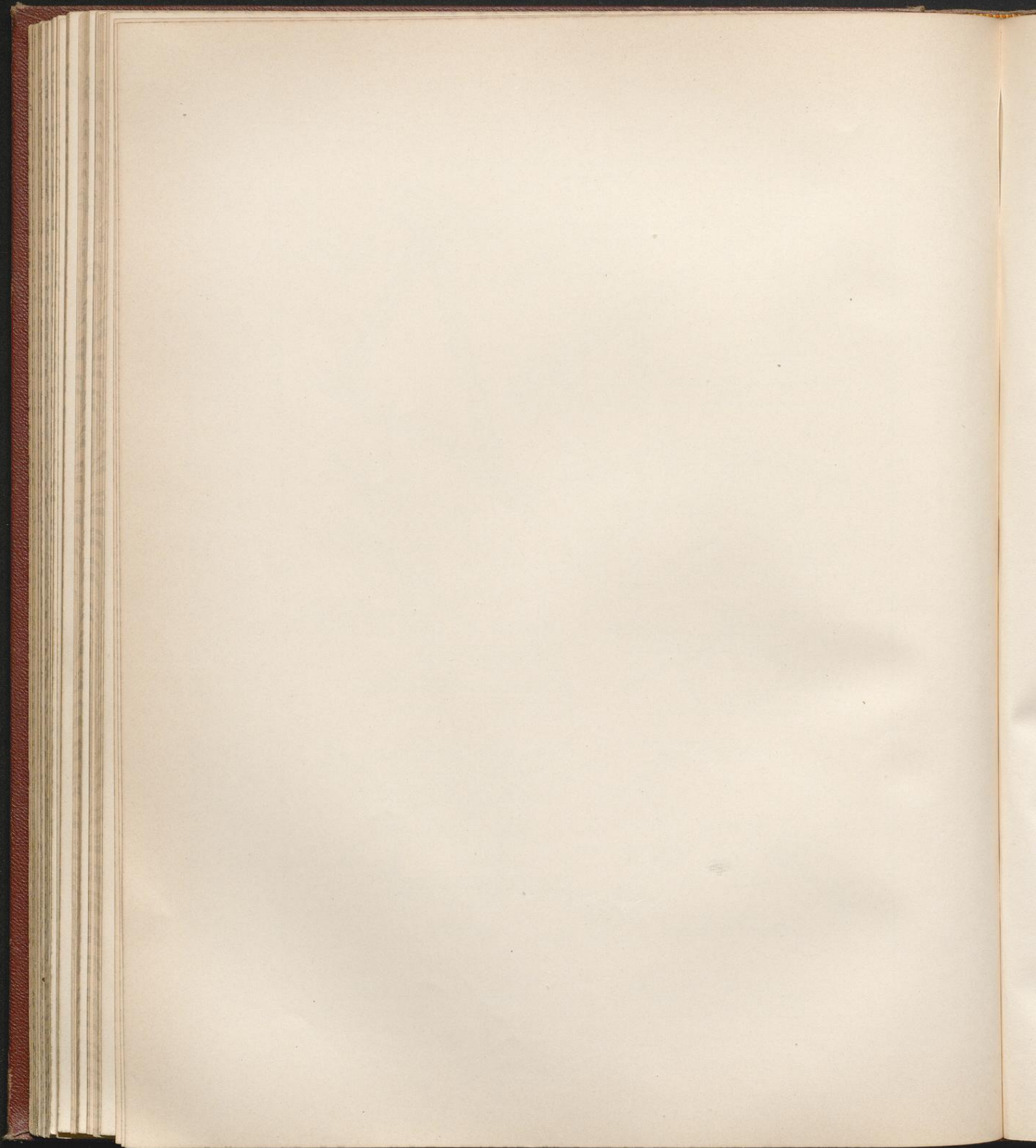
Fig. 5. 1:75
 Kehle der Sägedächer.

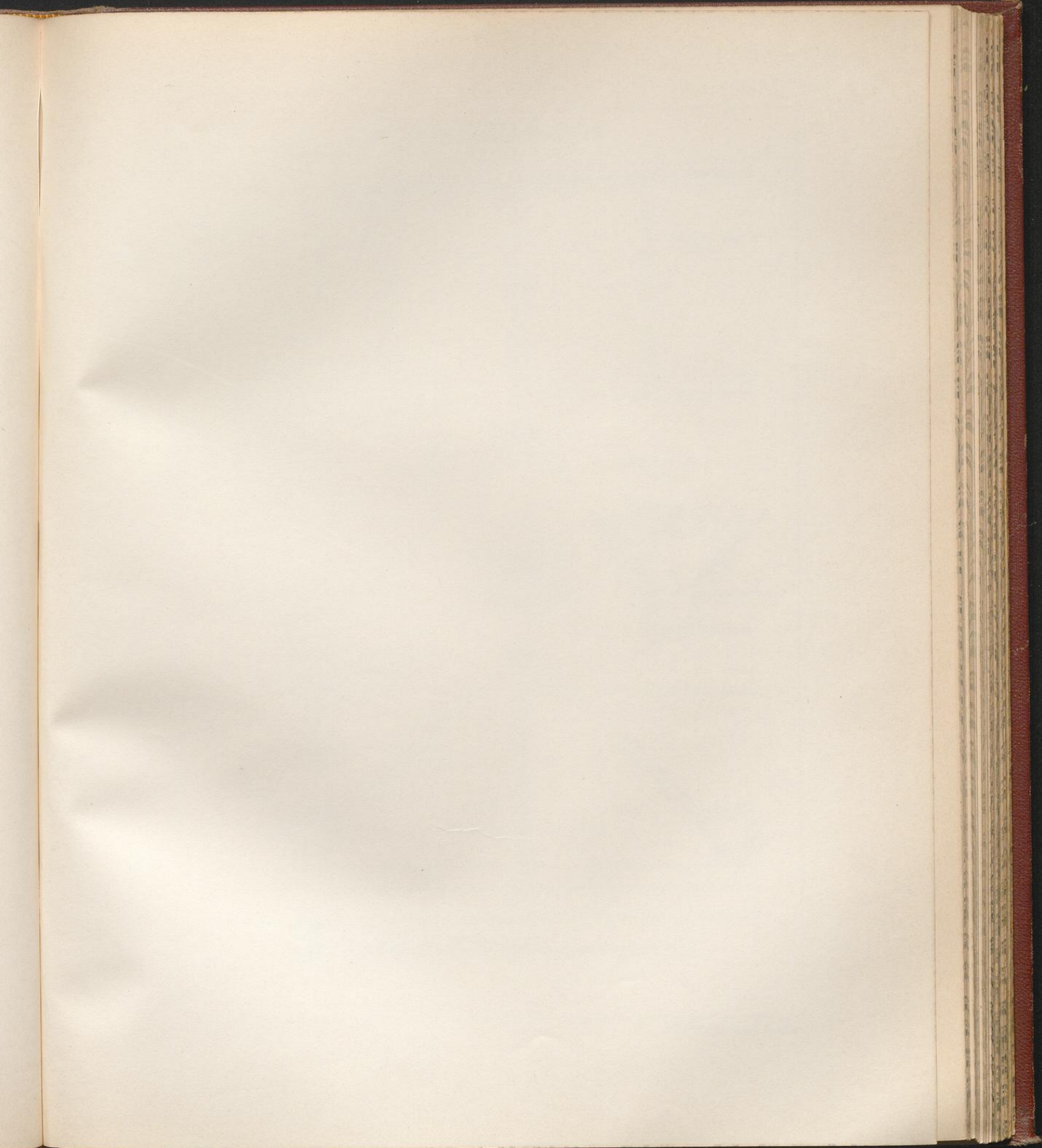
N.P. 10

I Pfette N.P. 19

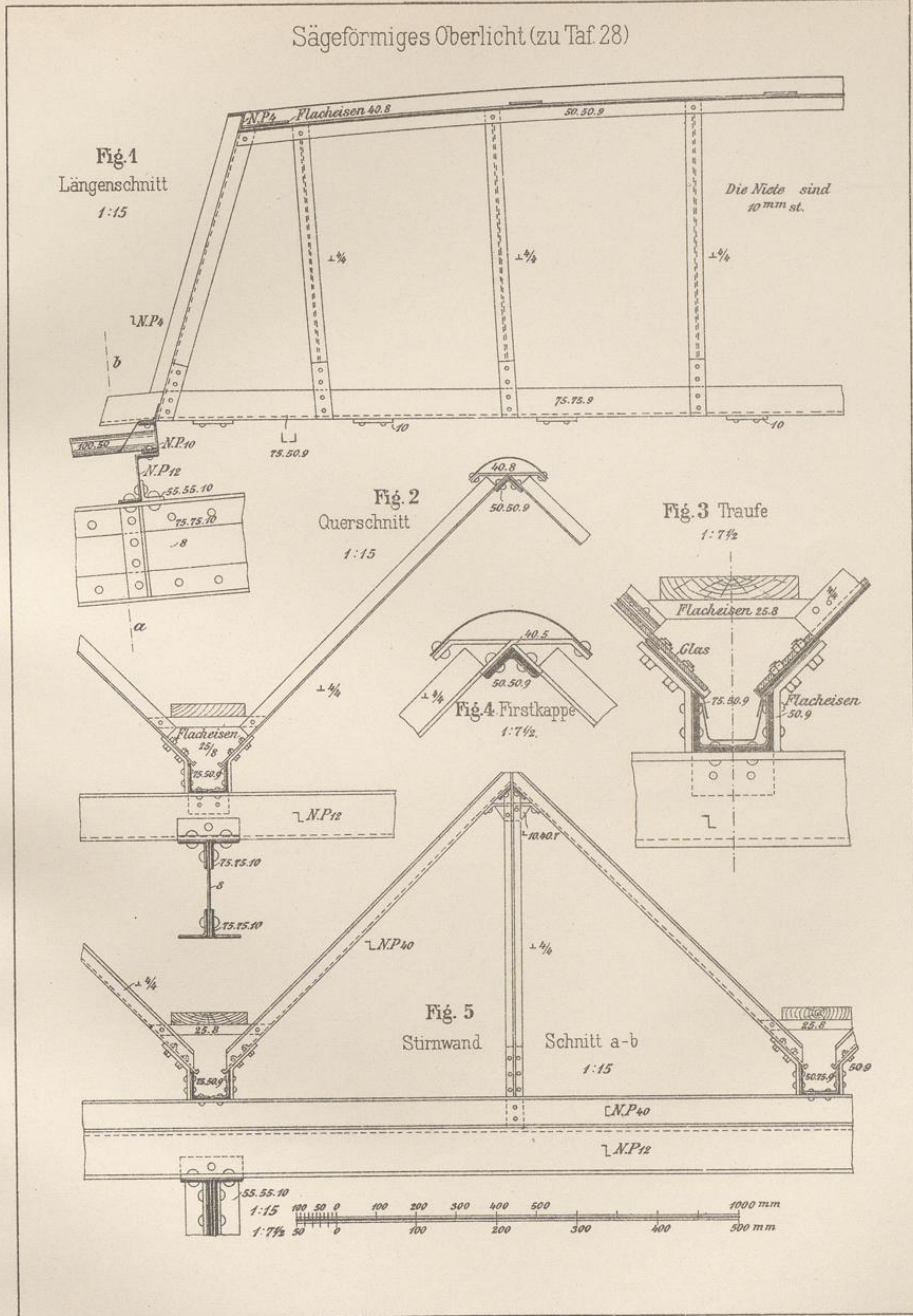
1:5
 0 50 100 200 mm

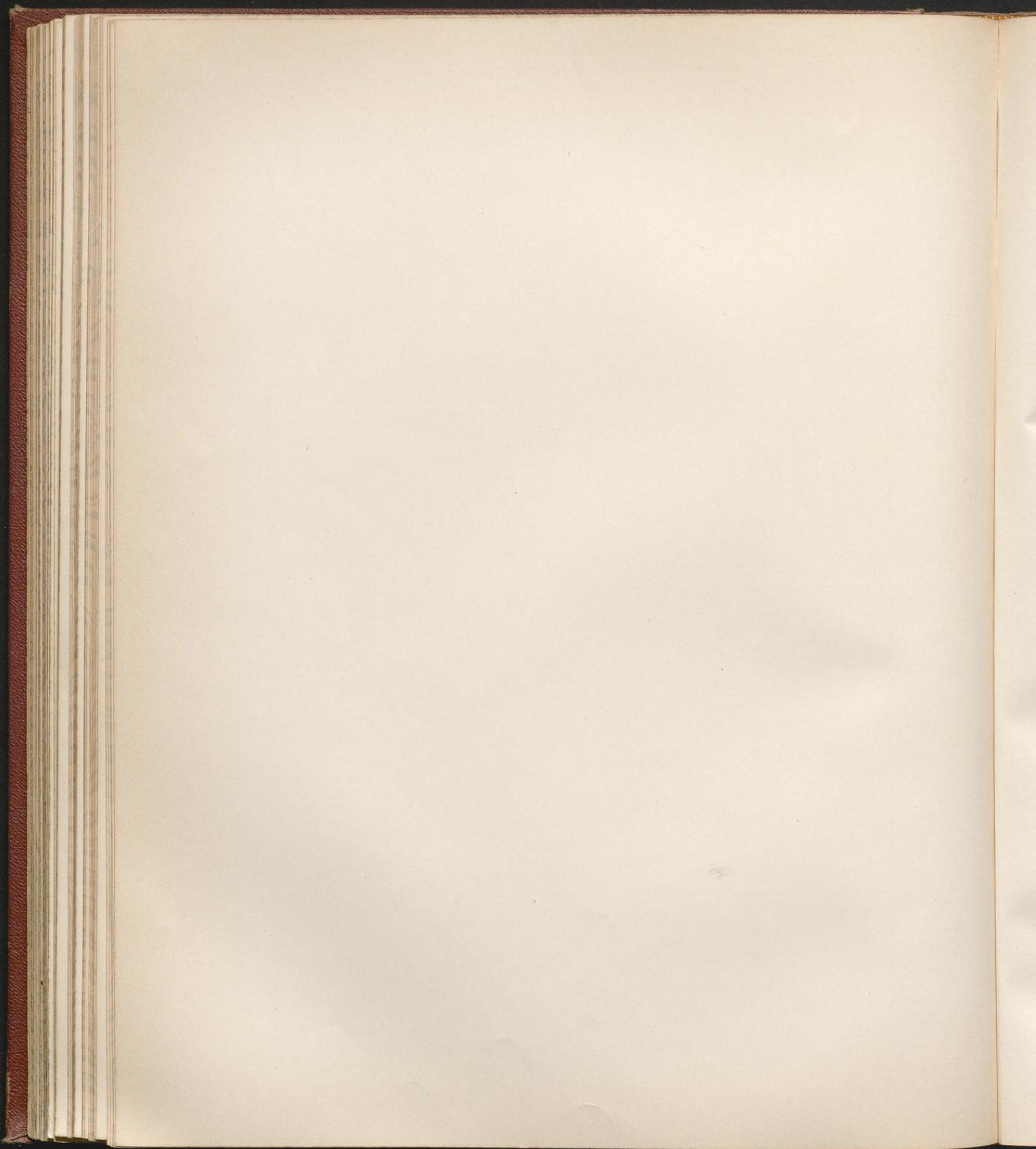
1:7,5
 0 50 100 200 300 mm

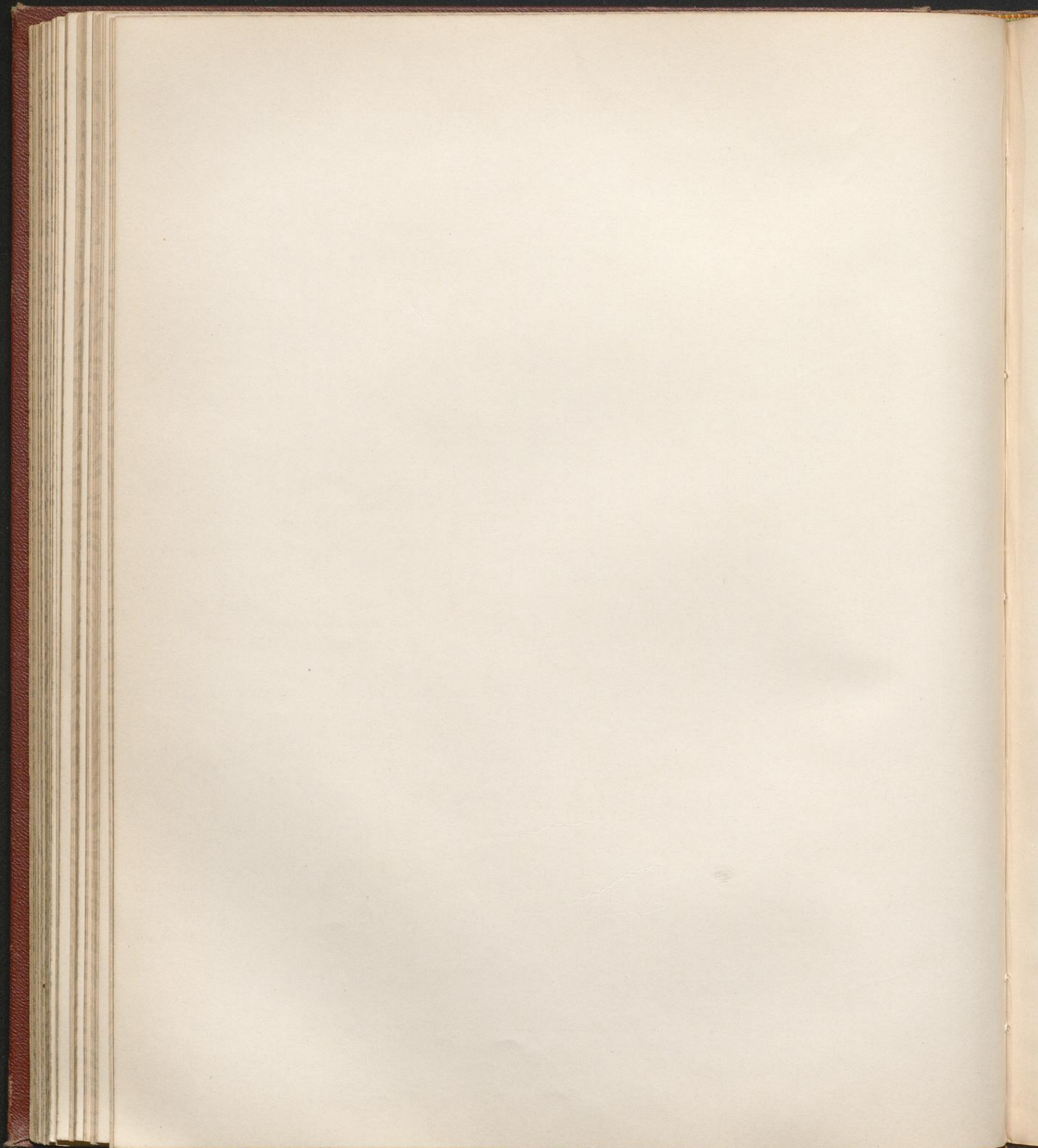




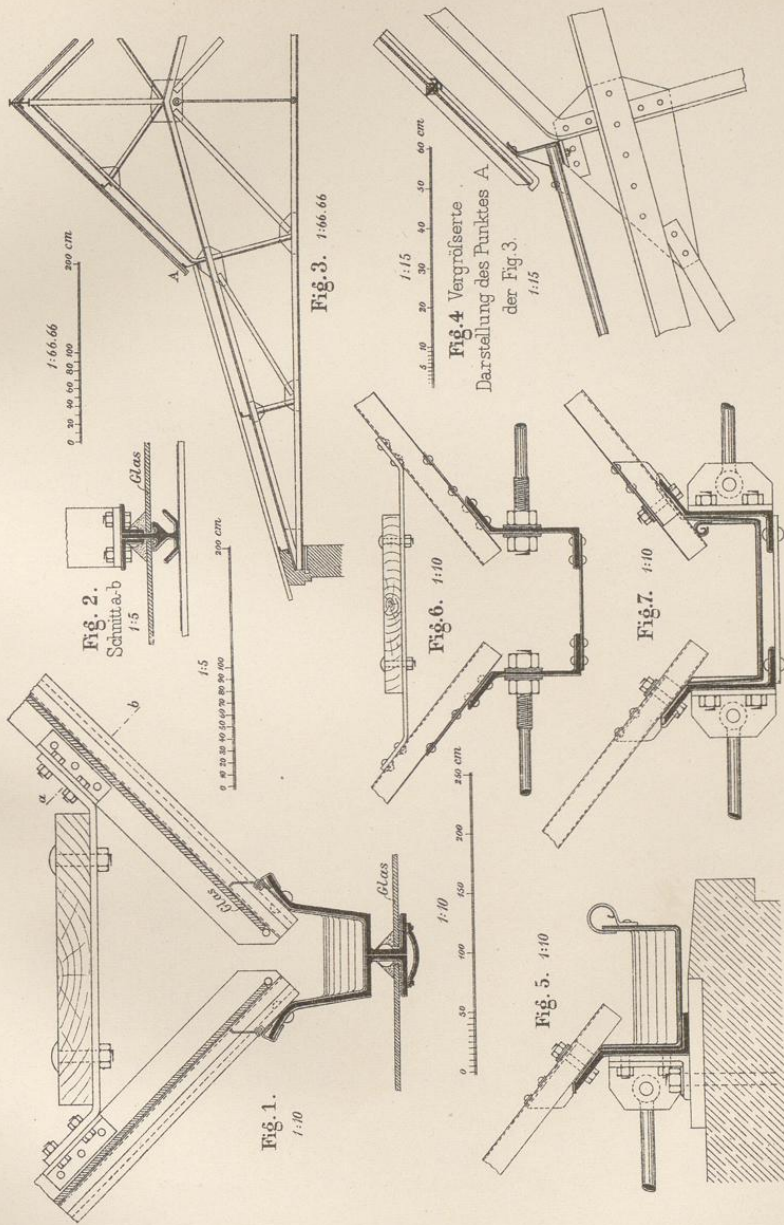
Sägeförmiges Oberlicht (zu Taf 28)

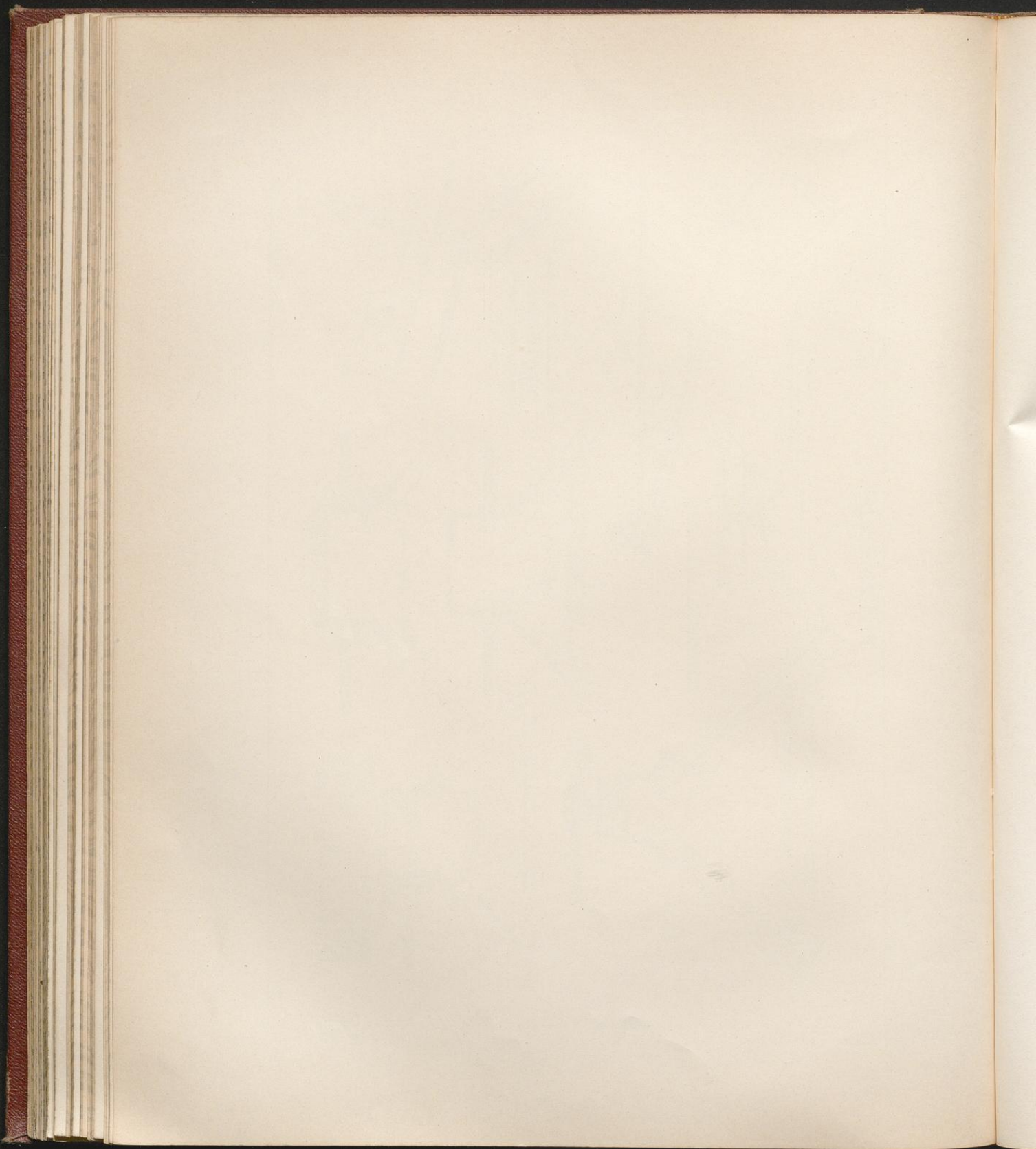


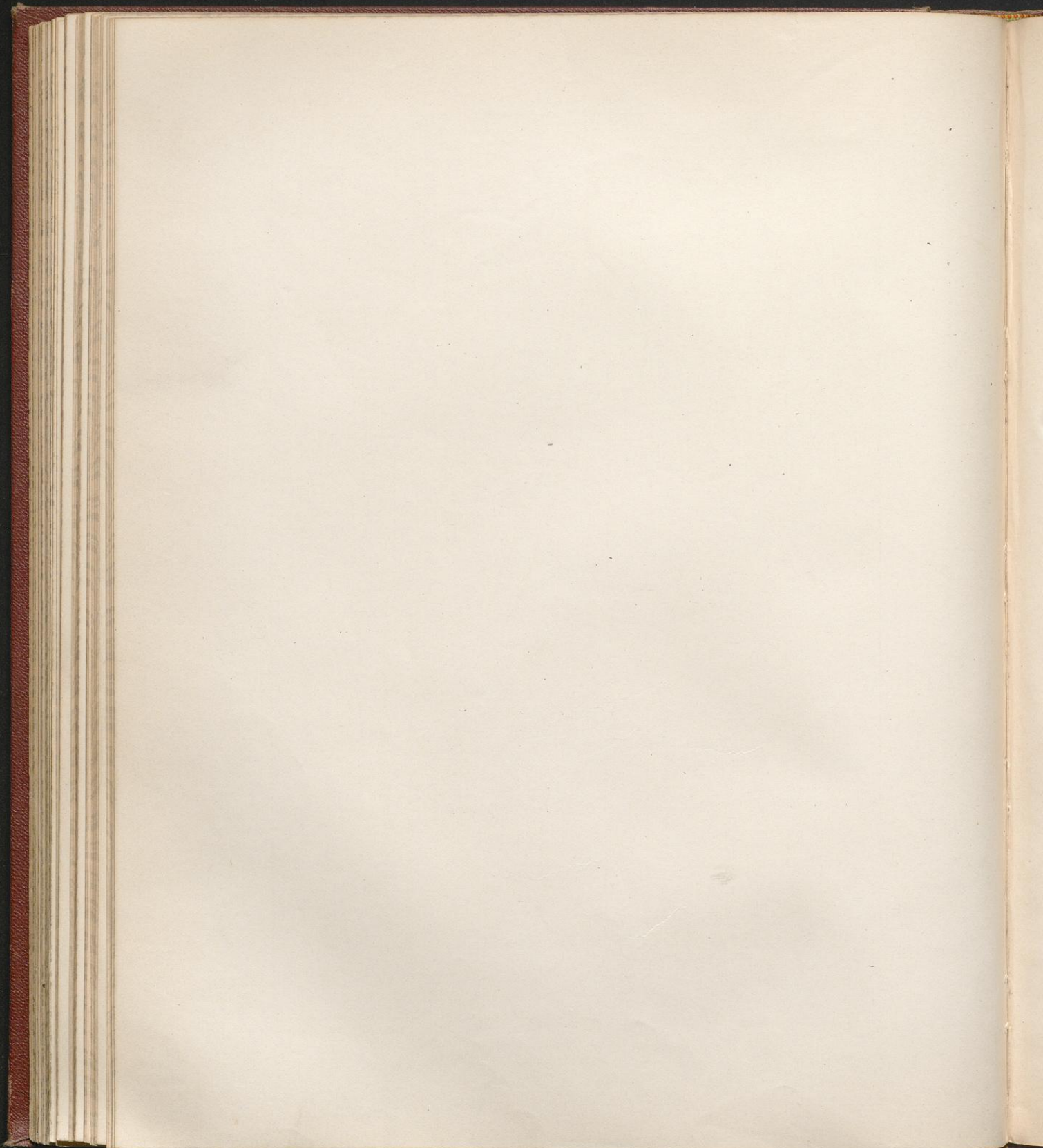




Trauf-Anordnungen.







Oberlichter.

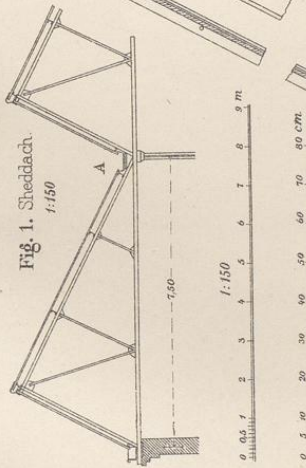


Fig. 2. Vergrößerte Darstellung des Punktes A der Fig. 1. 1:15

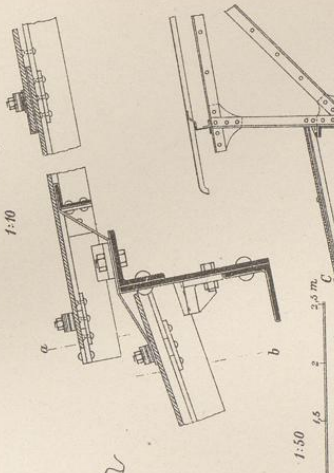
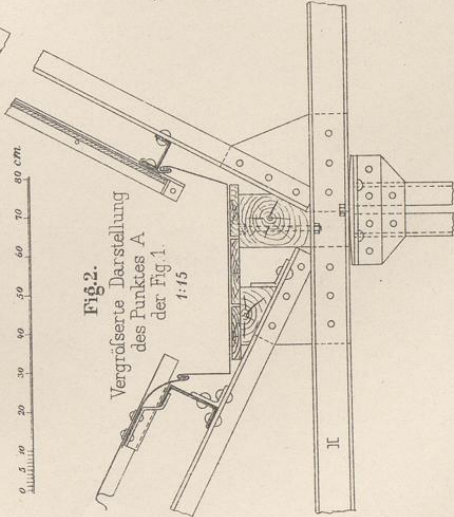


Fig. 4. Vergrößerte Darstellung des Punktes B der Fig. 3. 1:10

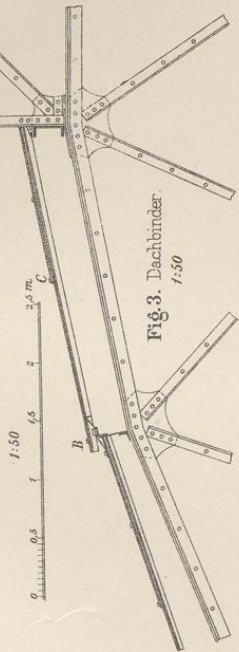


Fig. 3. Dachbinder. 1:50

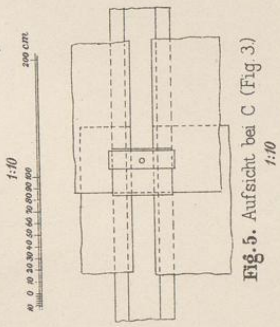


Fig. 5. Aufsicht bei C (Fig. 3) 1:10

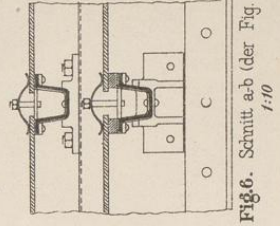
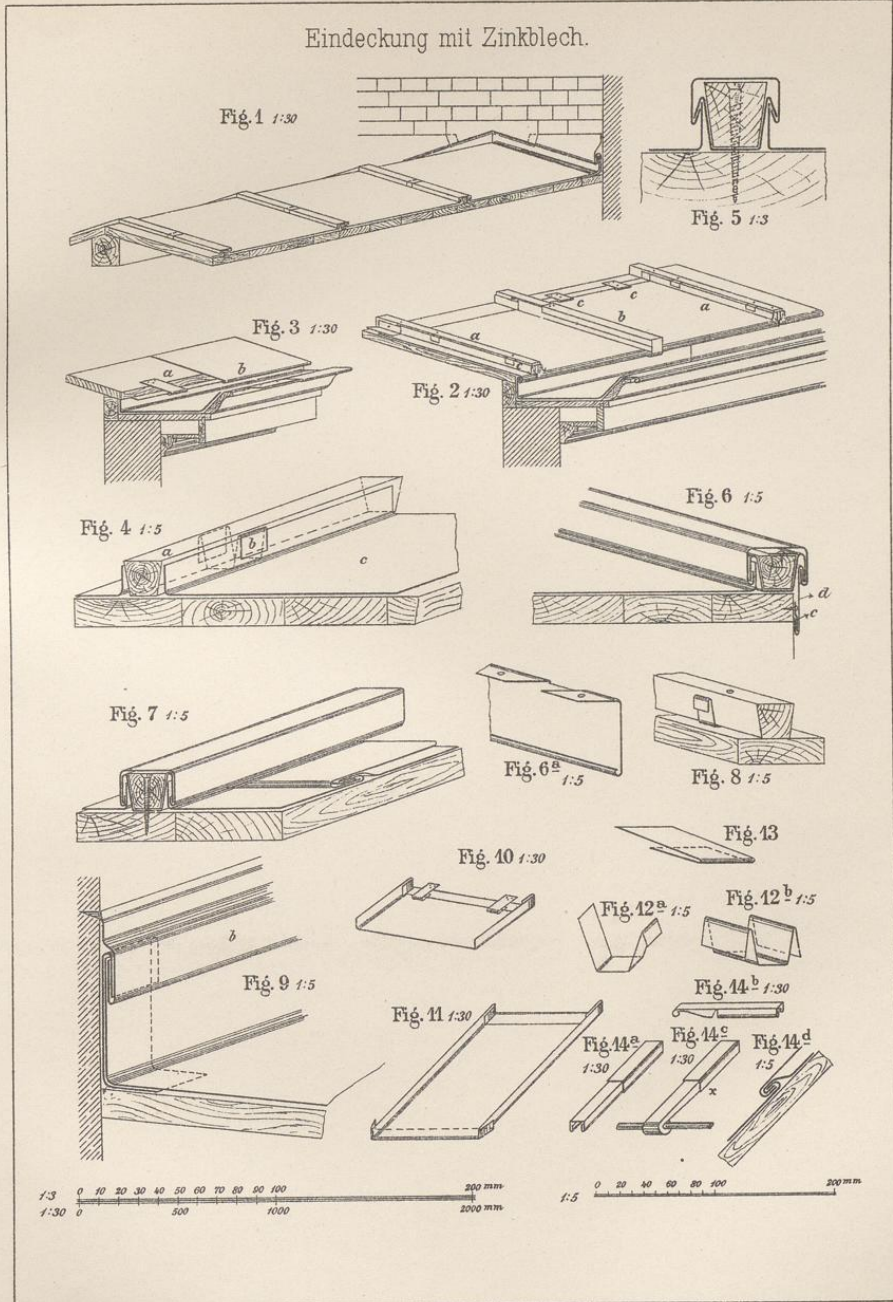
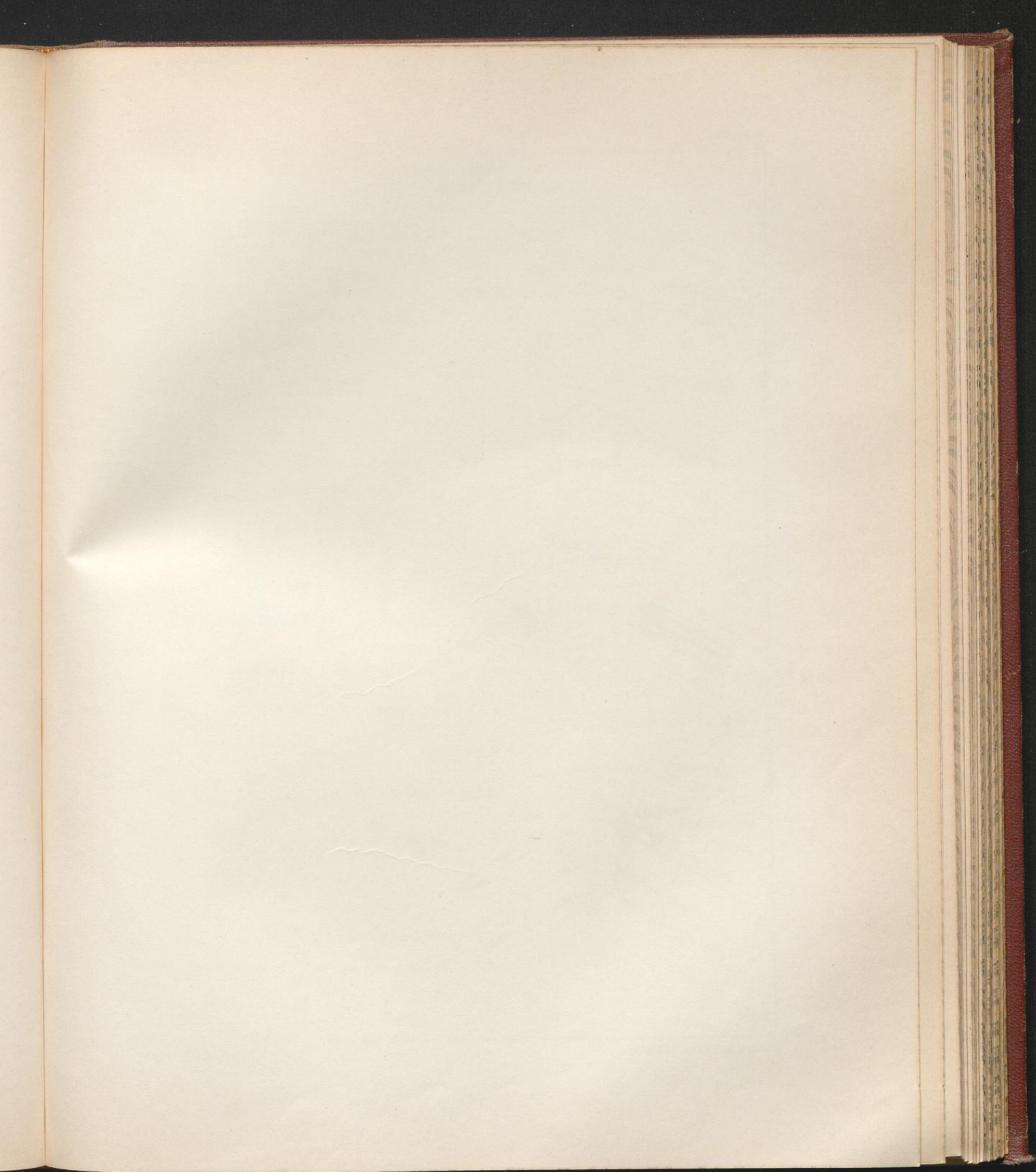


Fig. 6. Schnitt a-b (der Fig. 4) 1:10

Eindeckung mit Zinkblech.





Wellblechdeckung
Eindeckung des Firstes bei Eisenwellblech

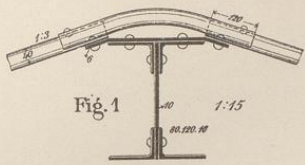


Fig. 1

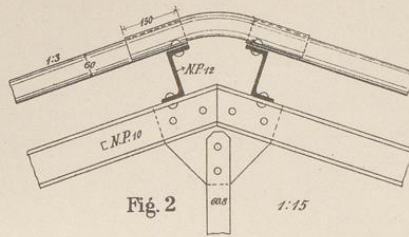


Fig. 2

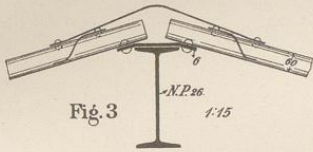


Fig. 3

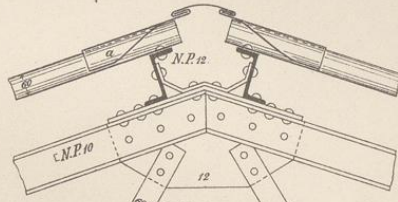


Fig. 4

Bahnhof Hildesheim

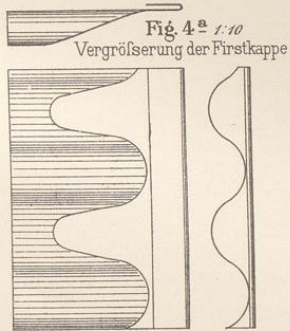


Fig. 4^a 1:10
Vergrößerung der Firstkappe

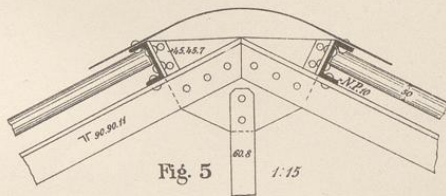


Fig. 5

Werkstätte Leinhausen

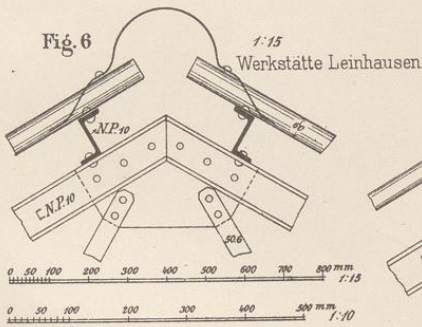


Fig. 6

Werkstätte Leinhausen

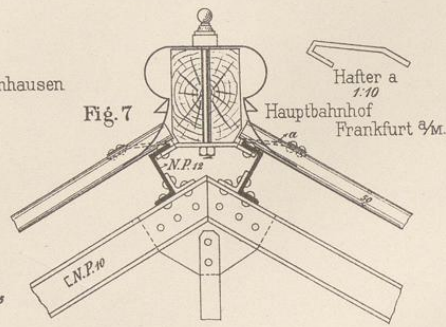
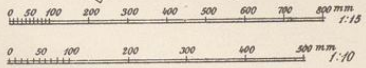
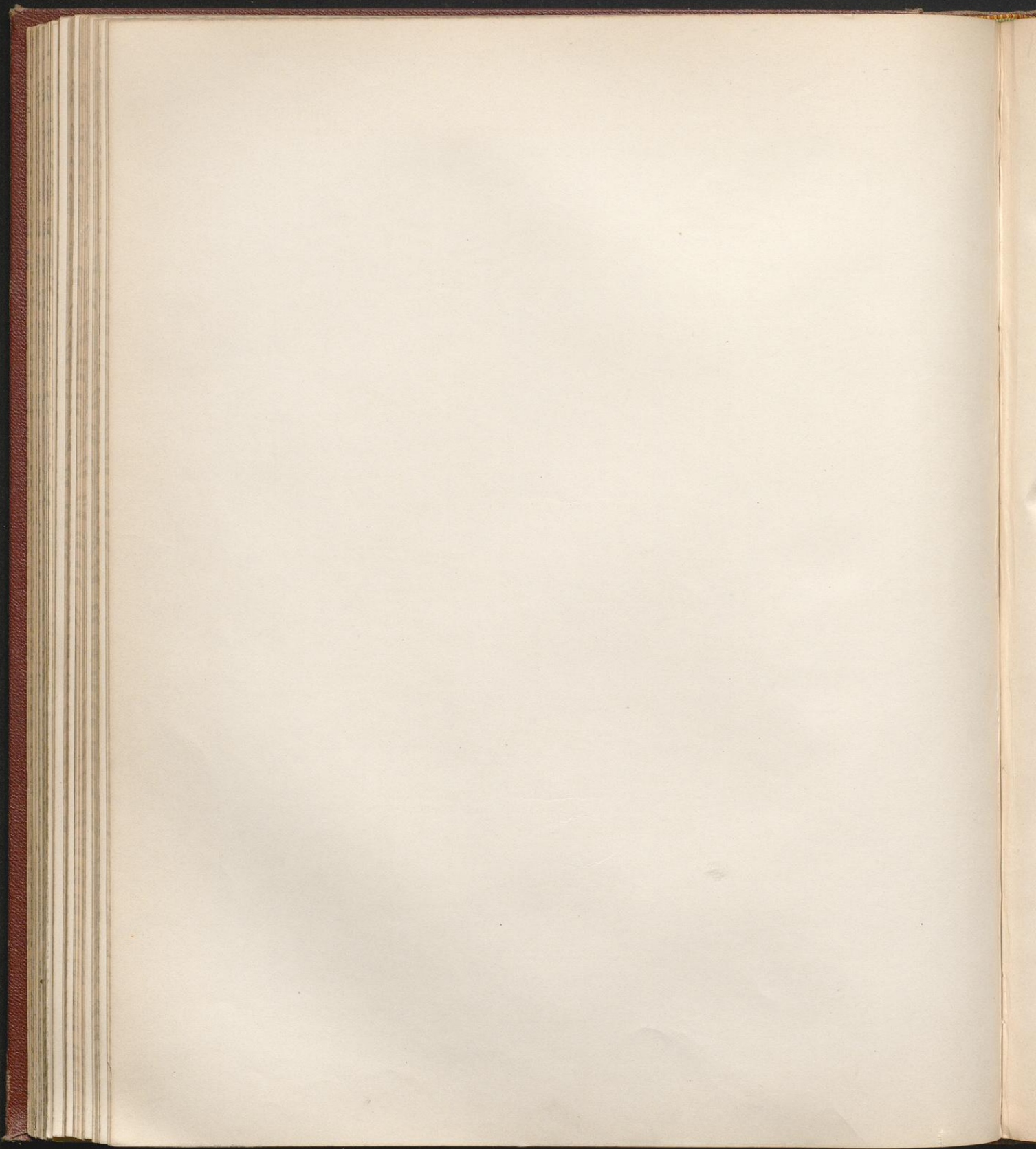


Fig. 7

Haften a 1:10
Hauptbahnhof Frankfurt a/M.





Wellblechdeckung

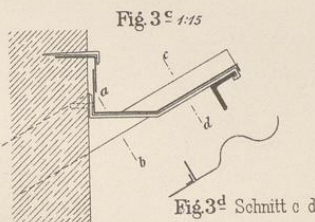
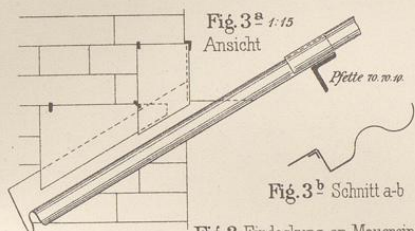
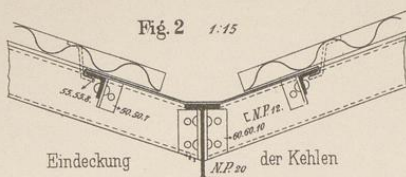
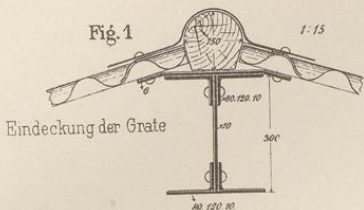
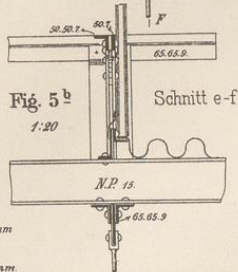
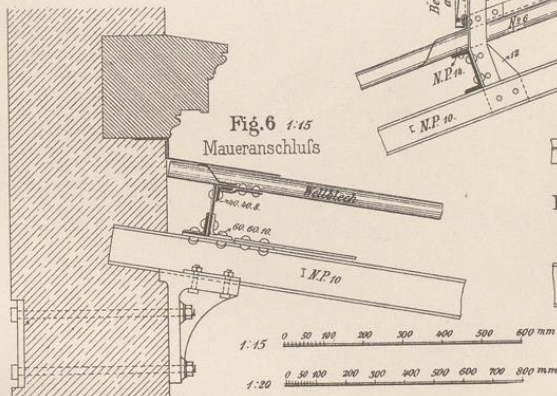
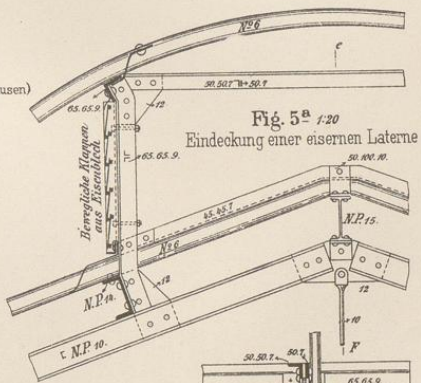
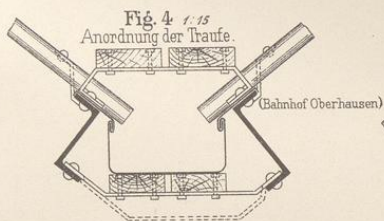
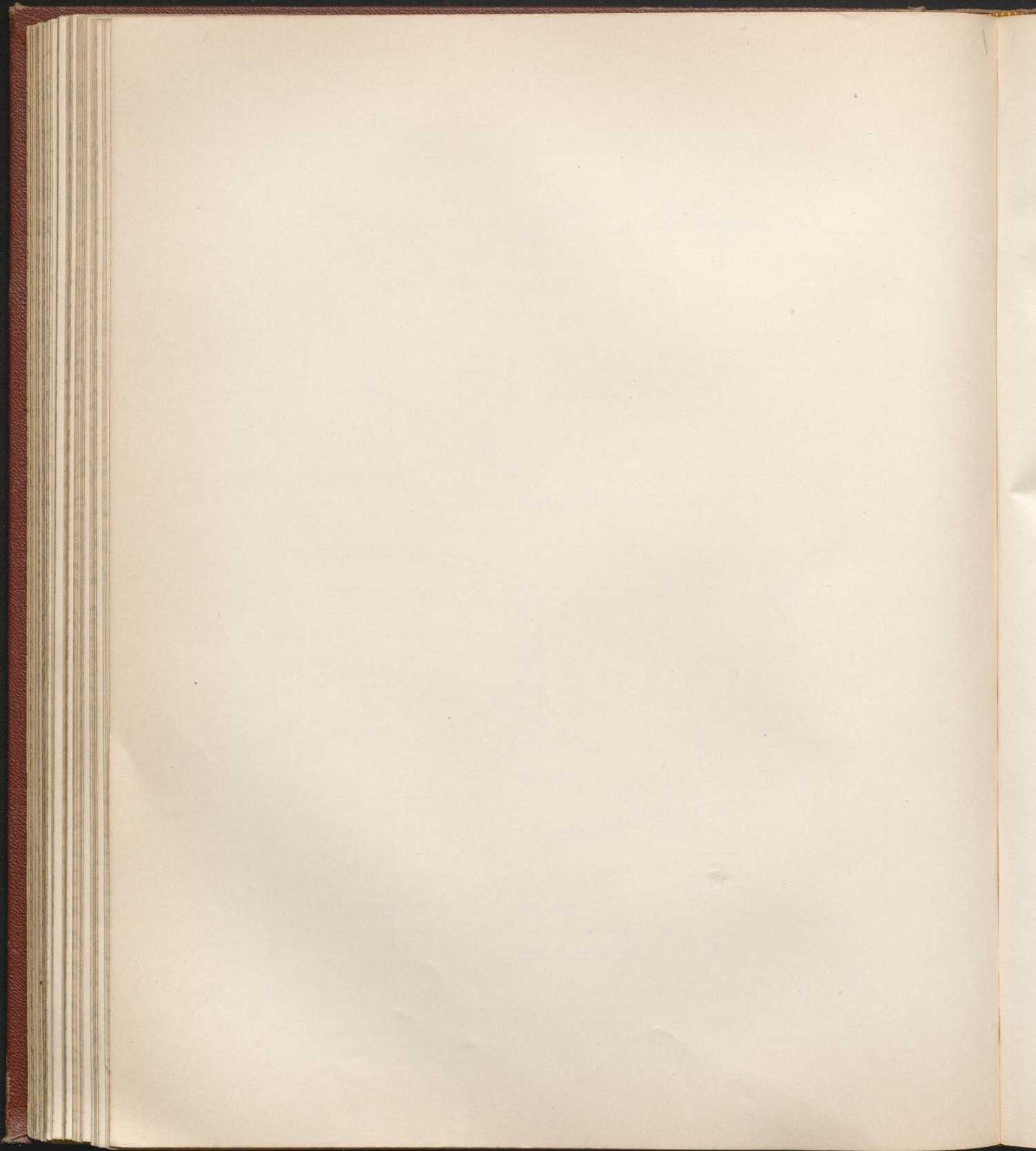
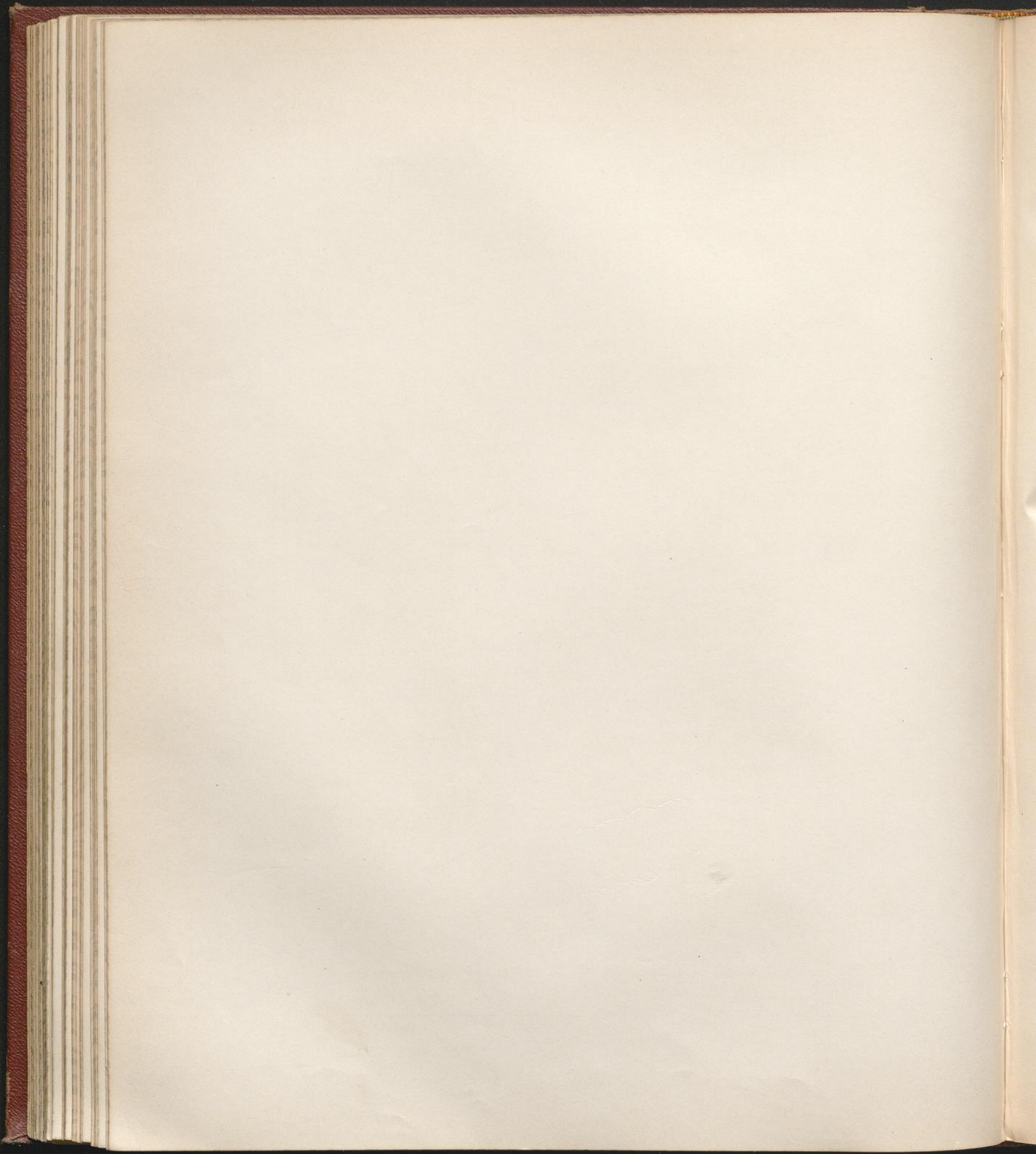


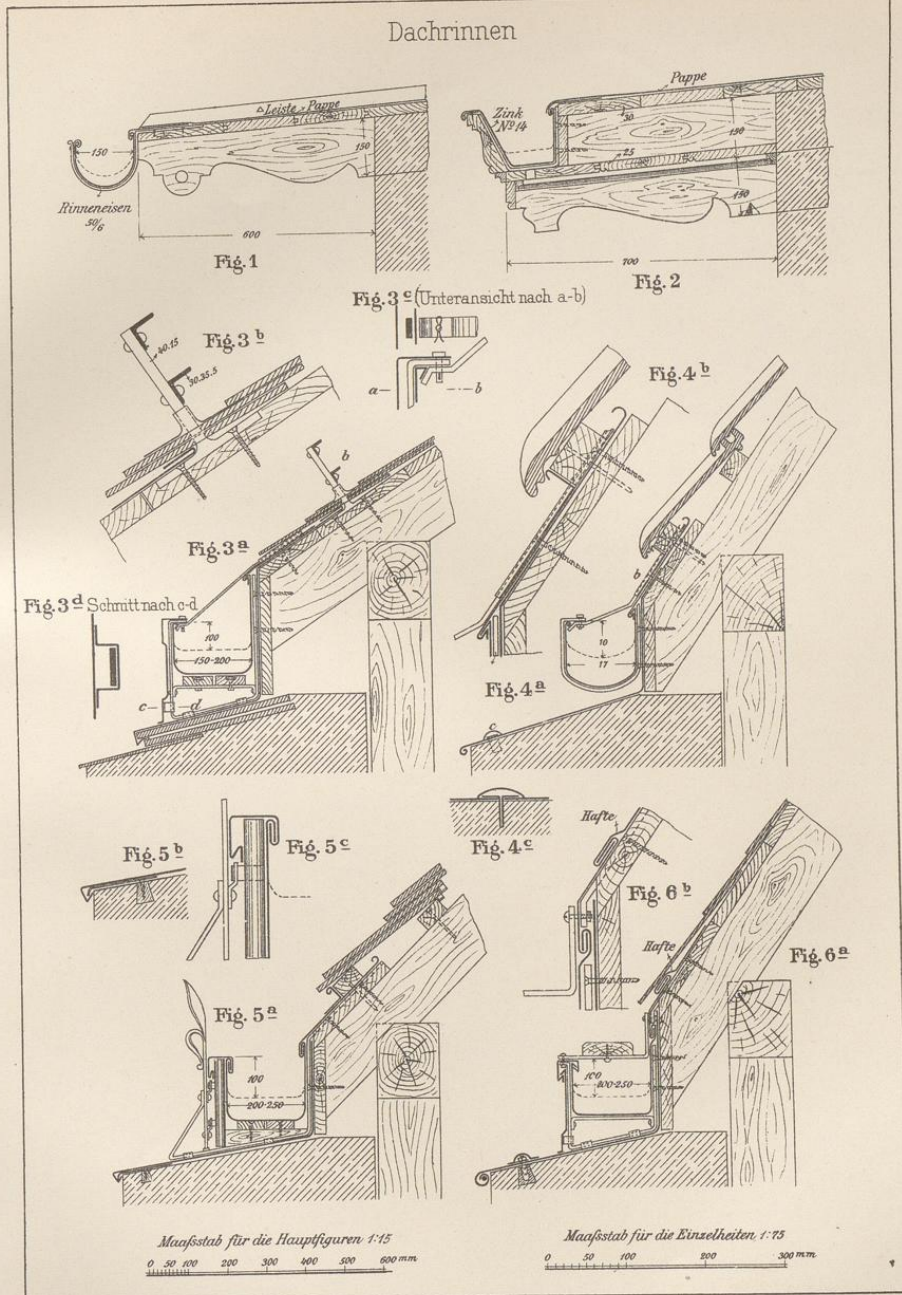
Fig. 3 Eindeckung an Mauereinsprünge (Schornsteinen u.a)

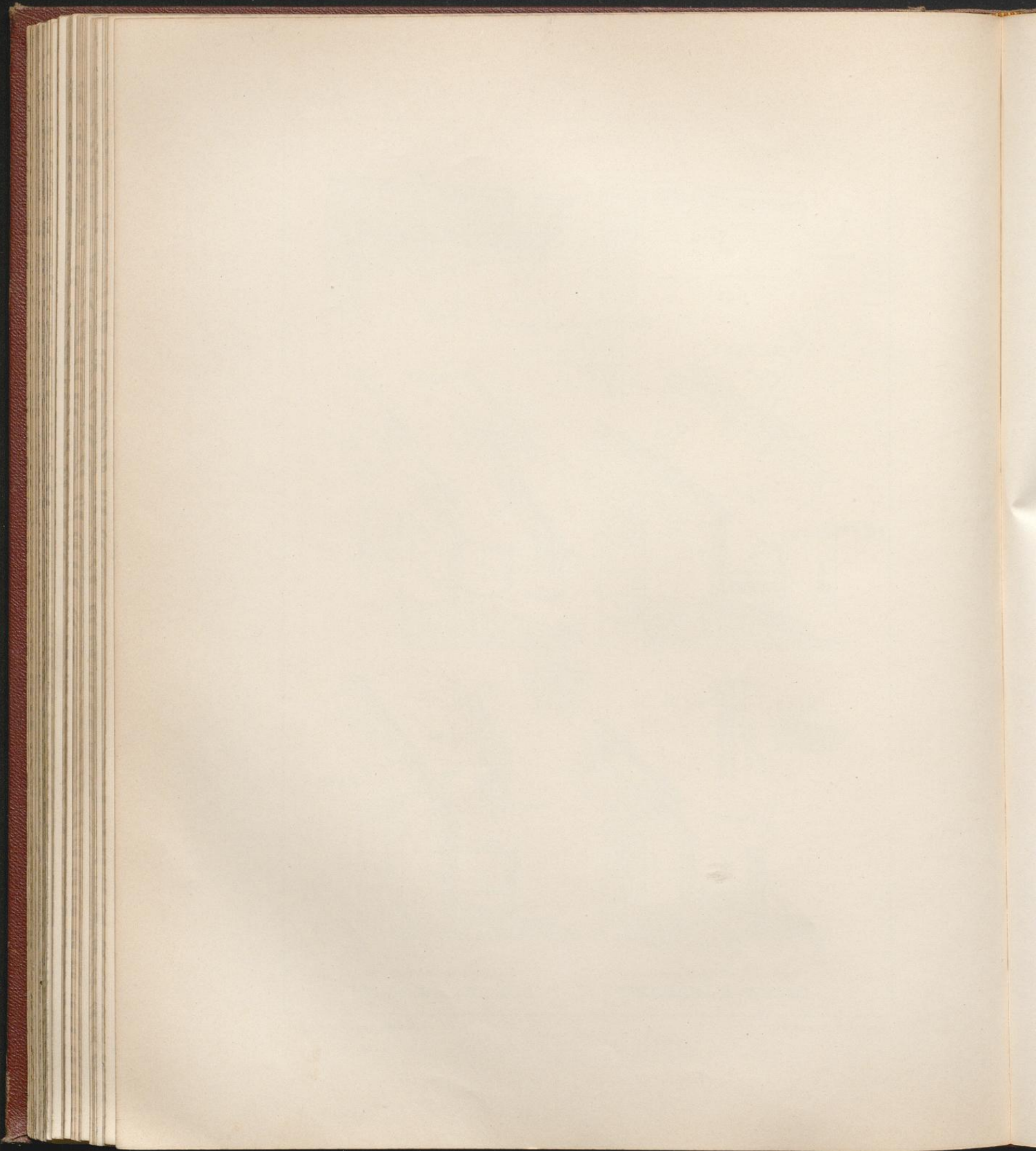




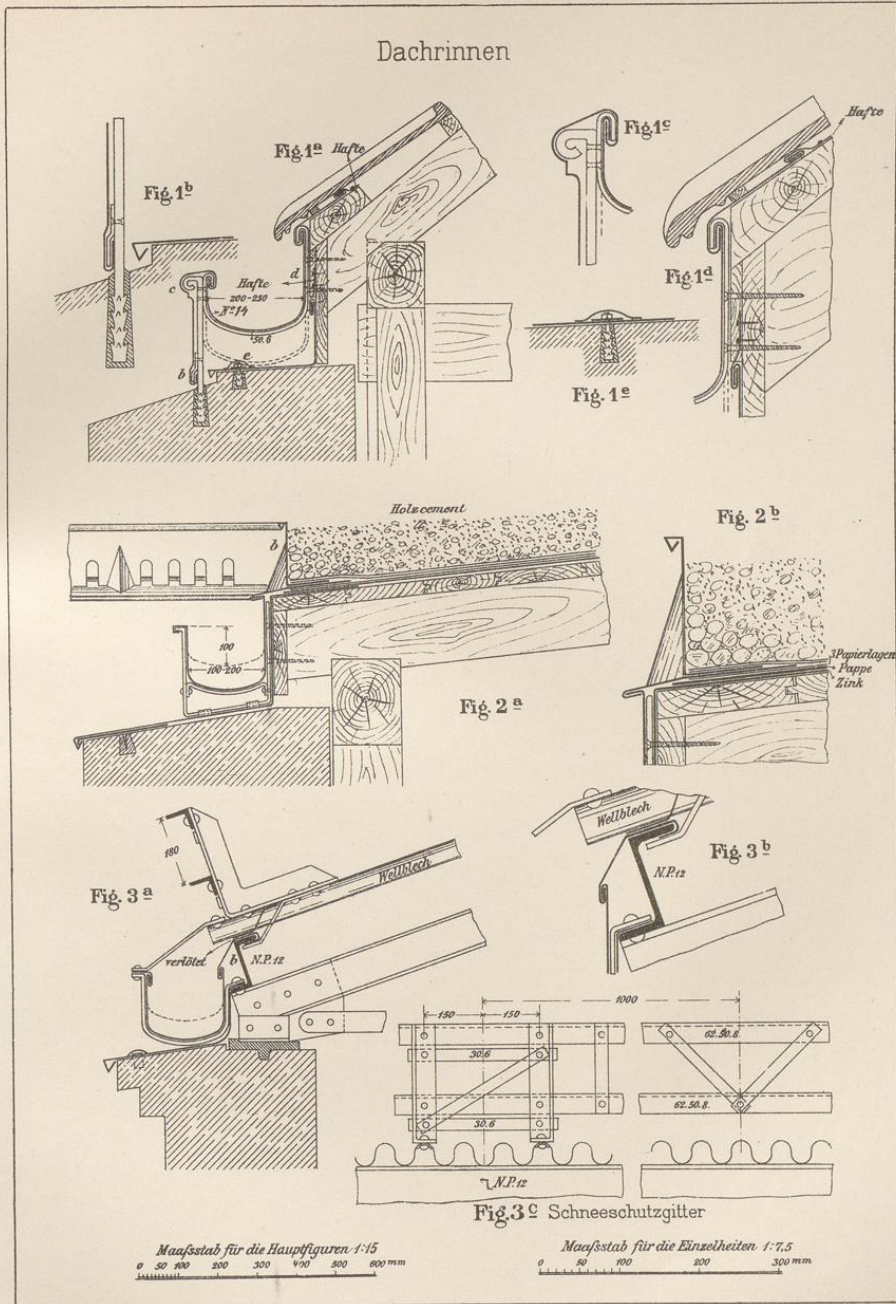


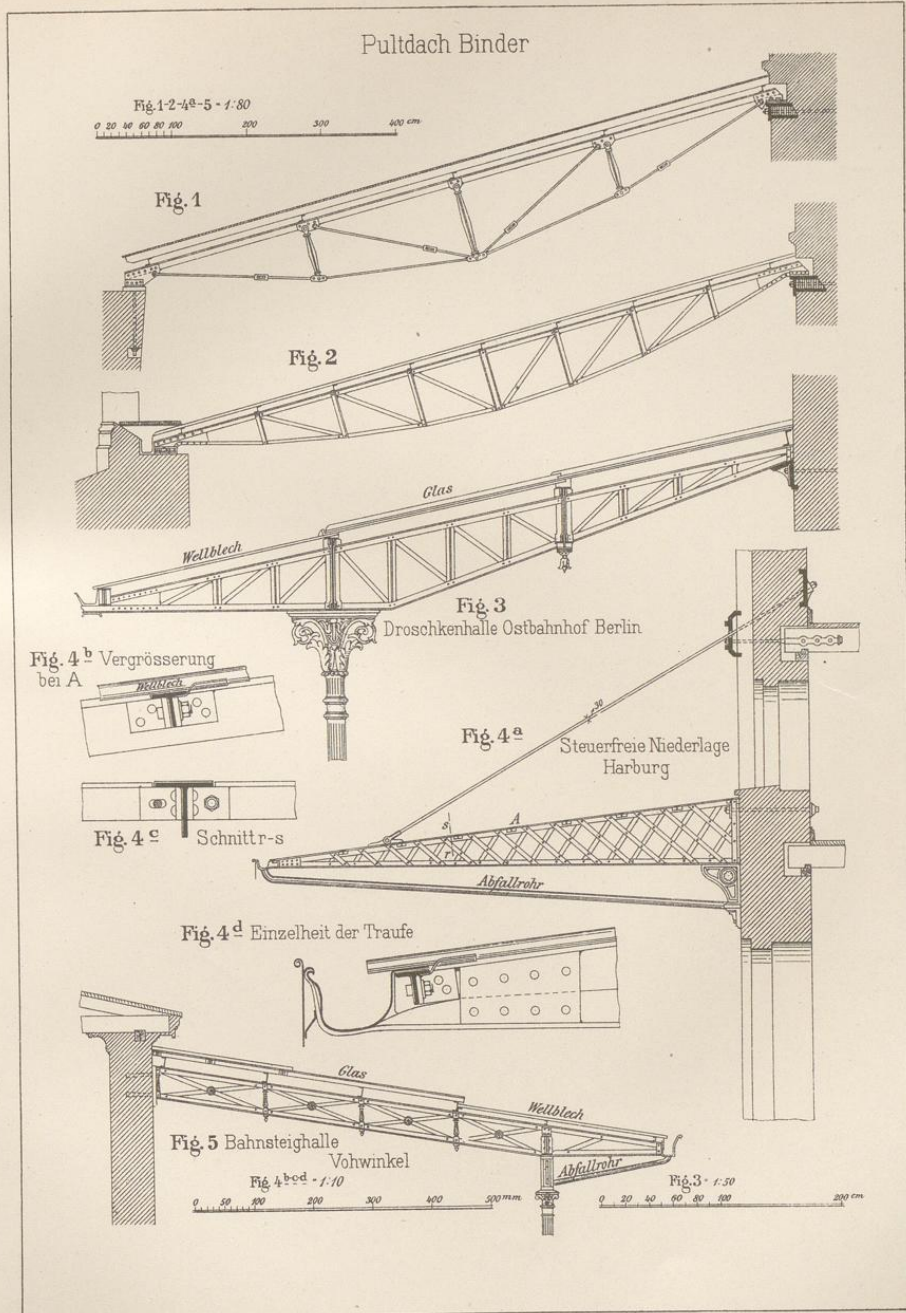
Dachrinnen

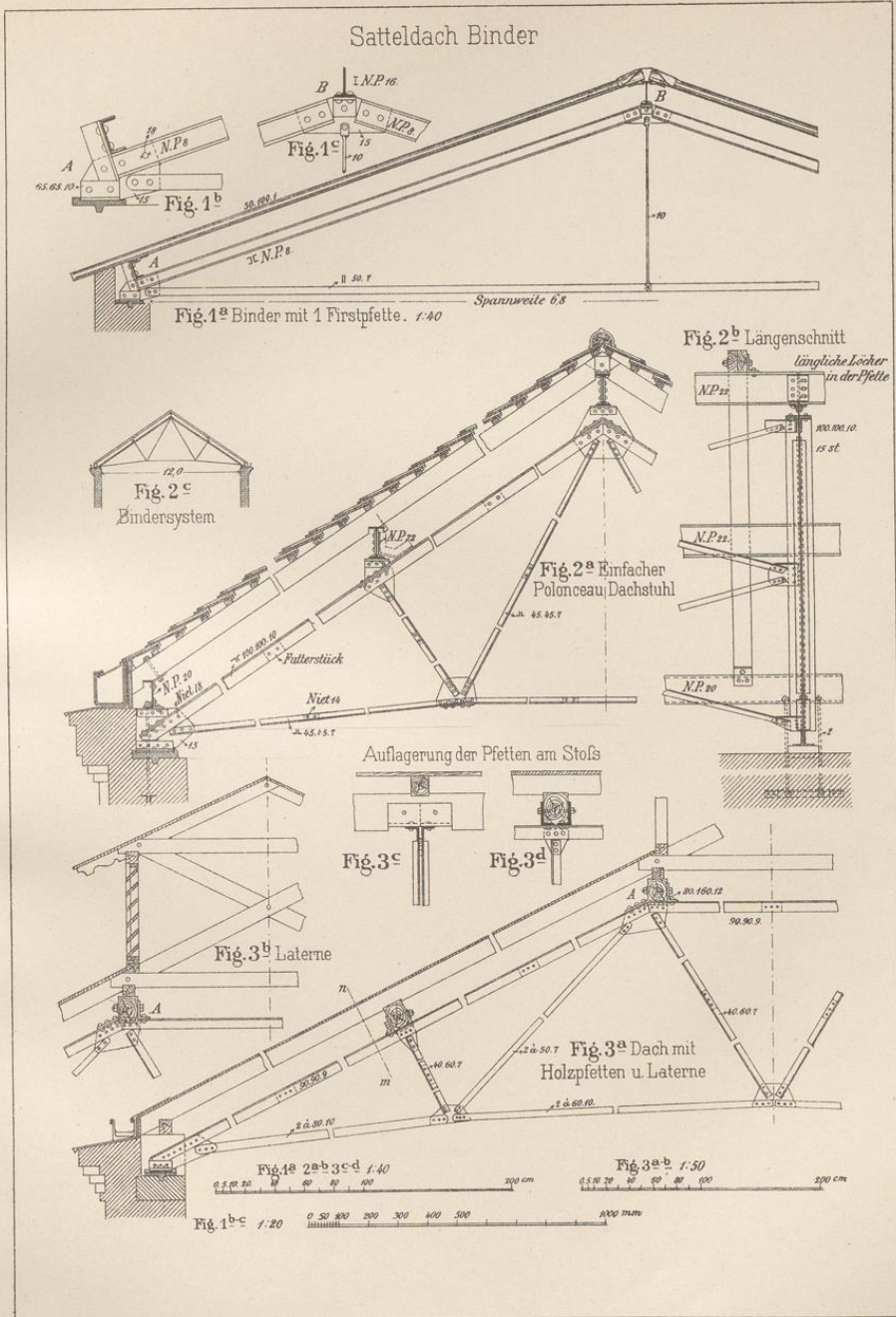


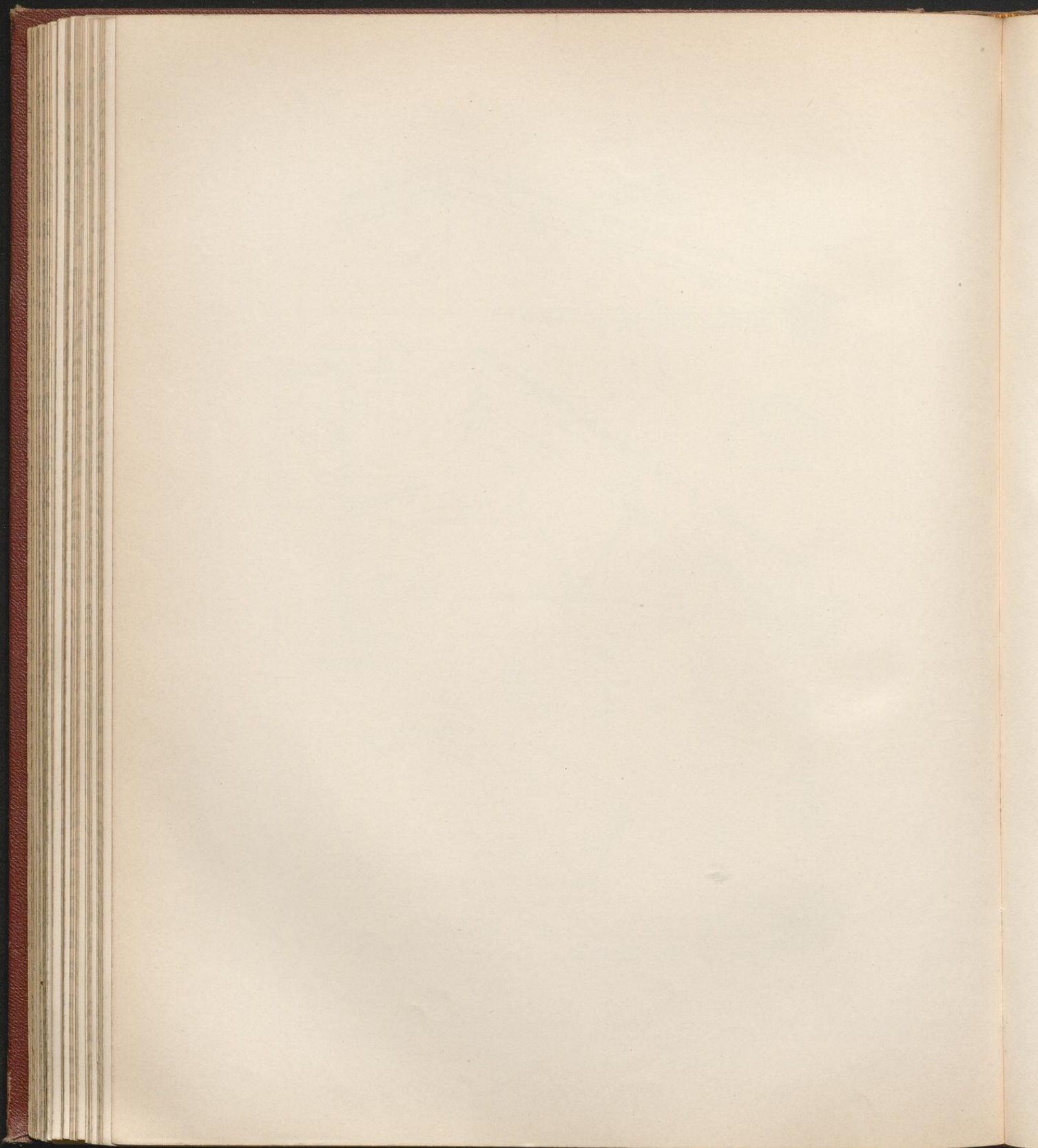


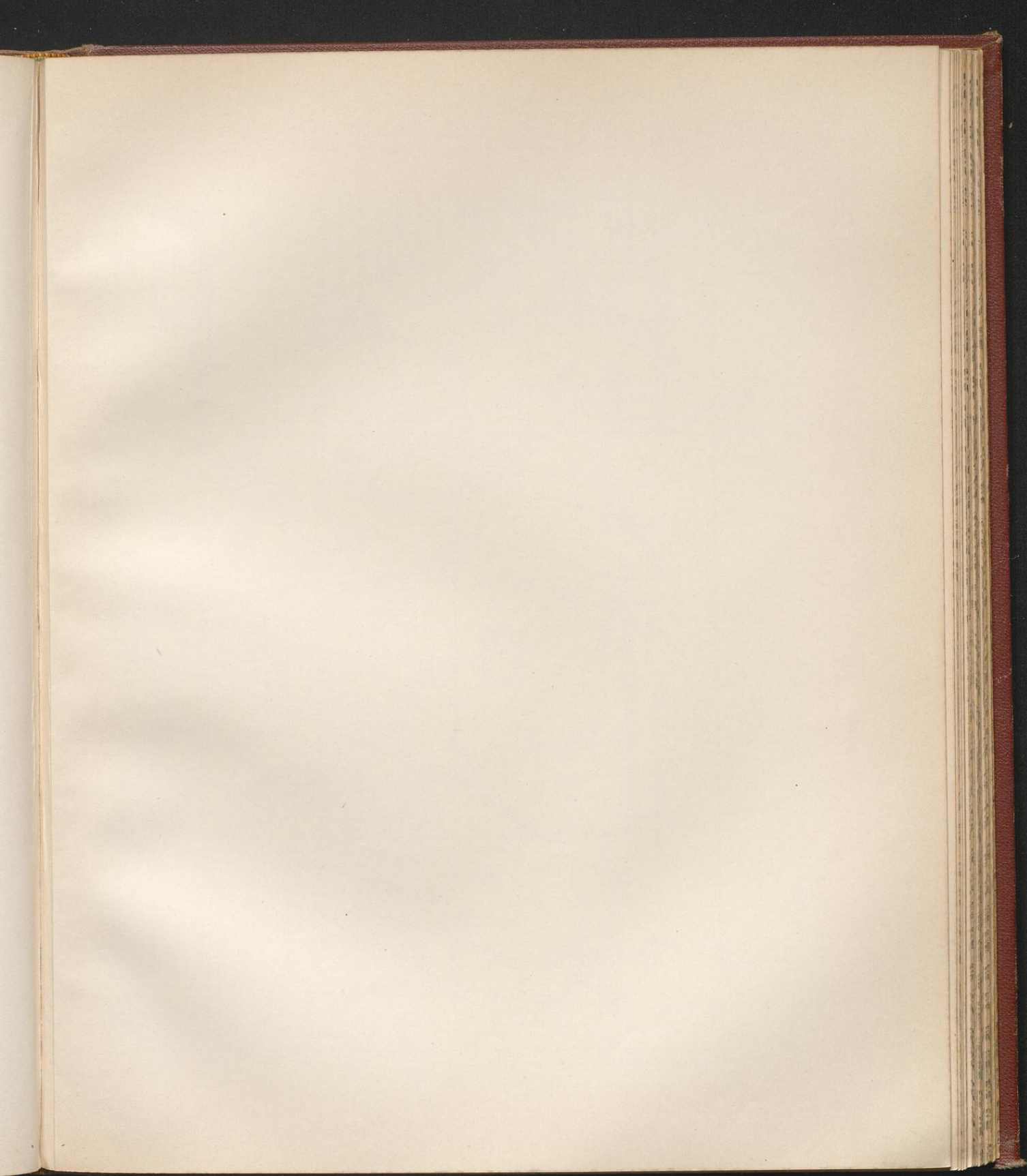
Dachrinnen



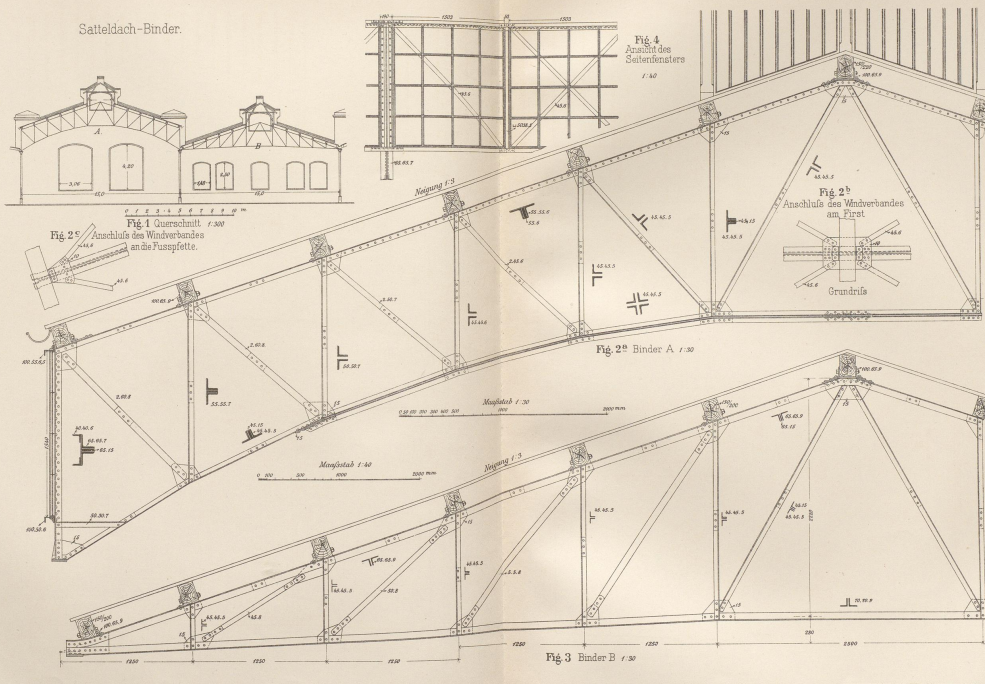


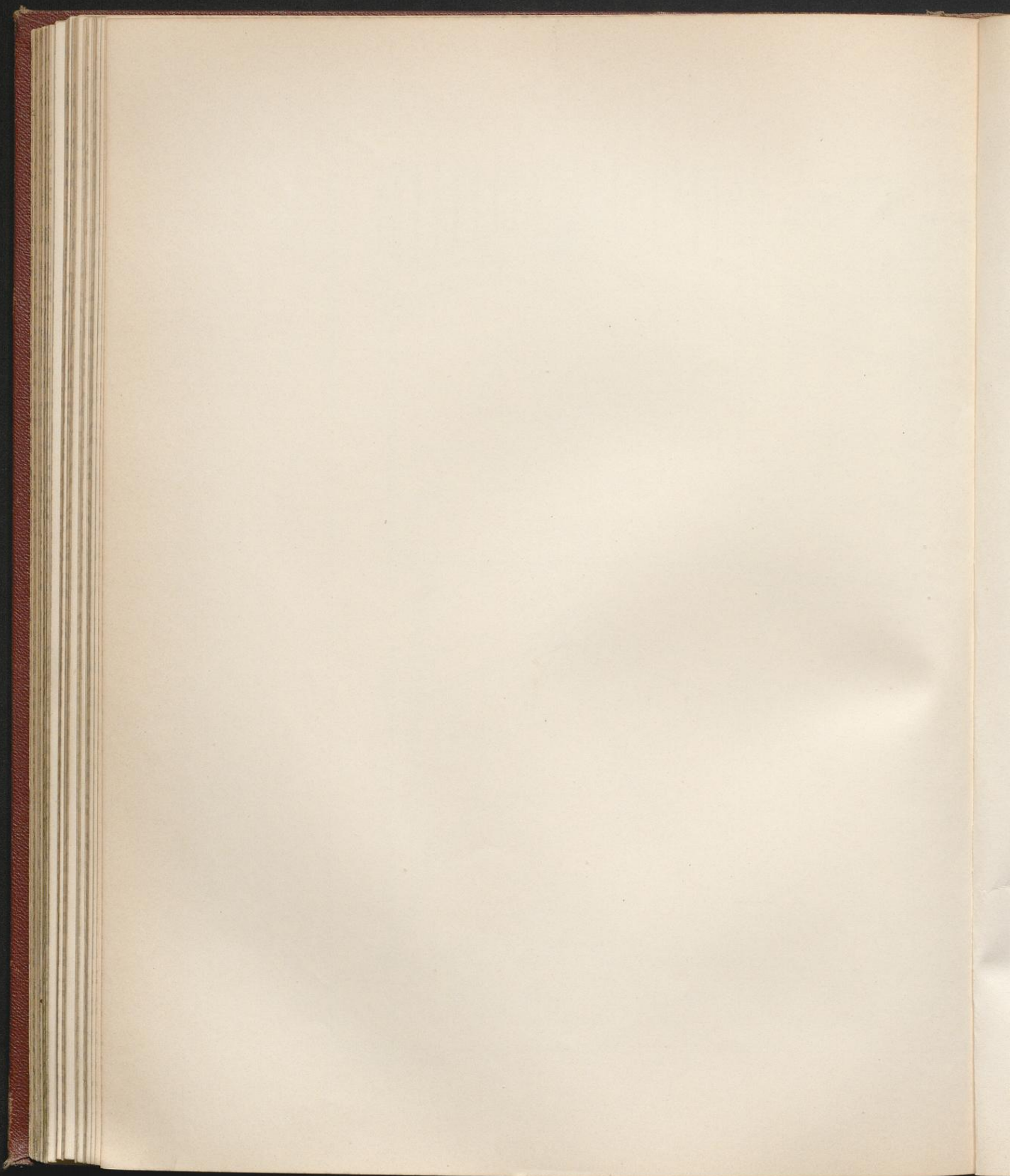




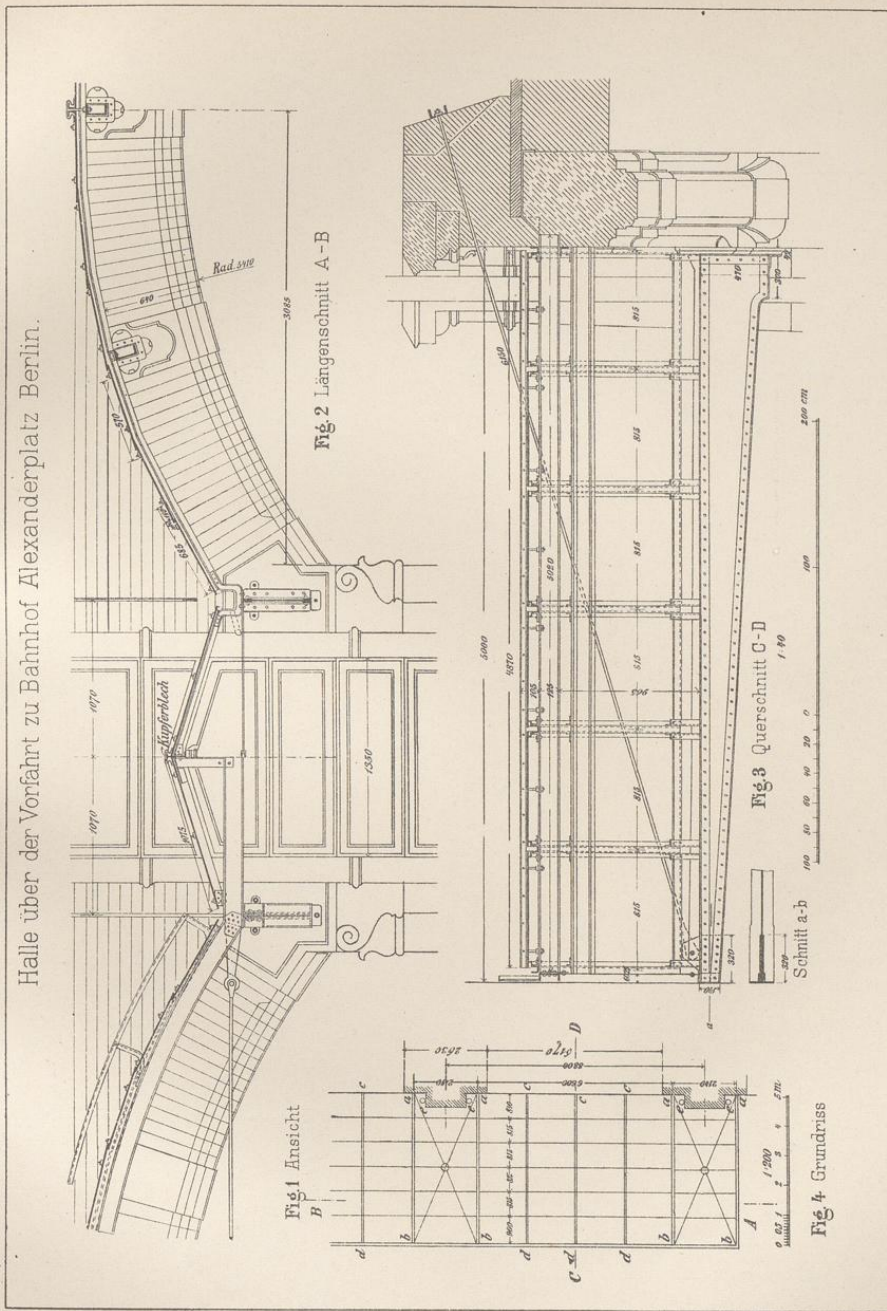


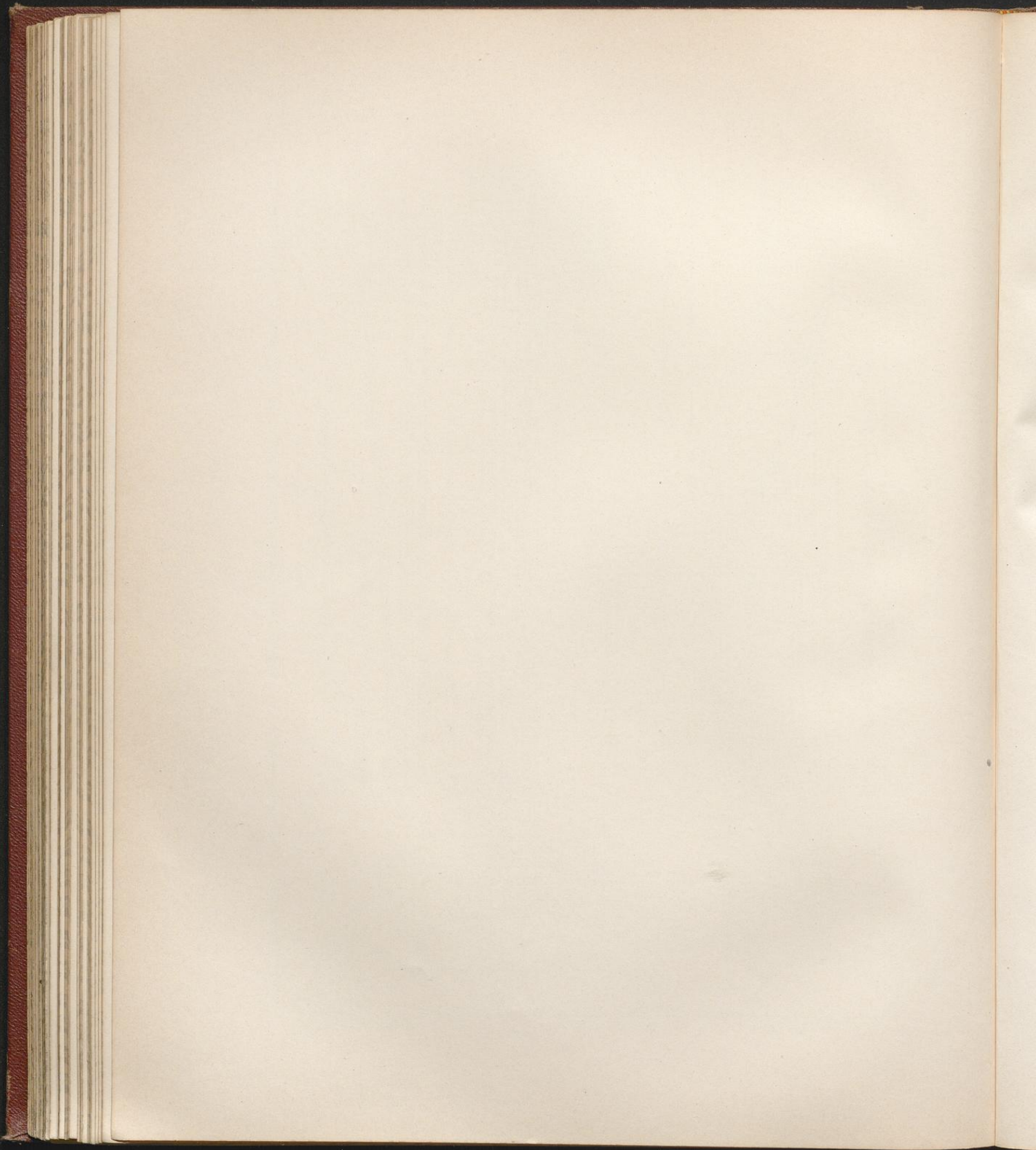
Satteldach-Binder

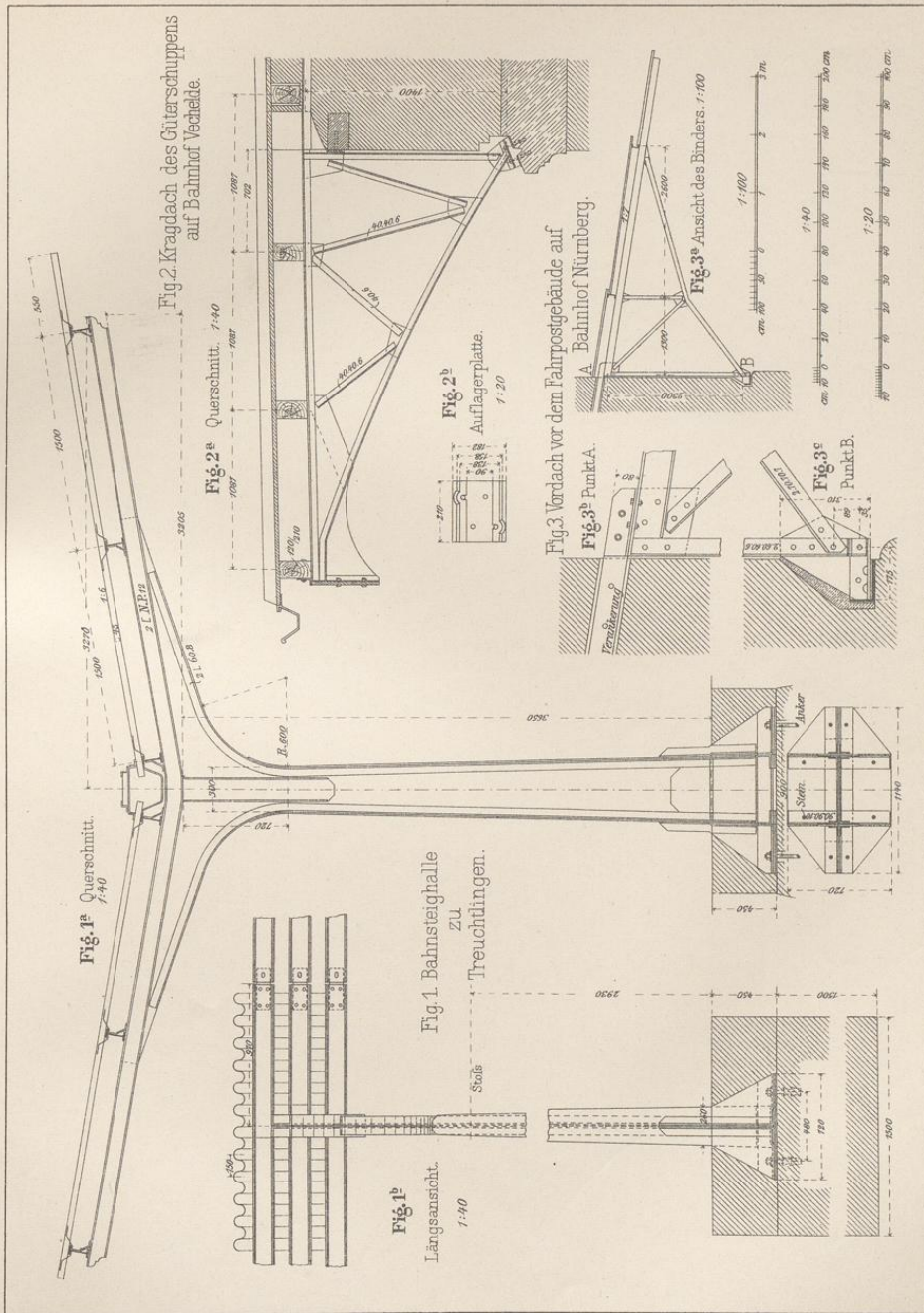


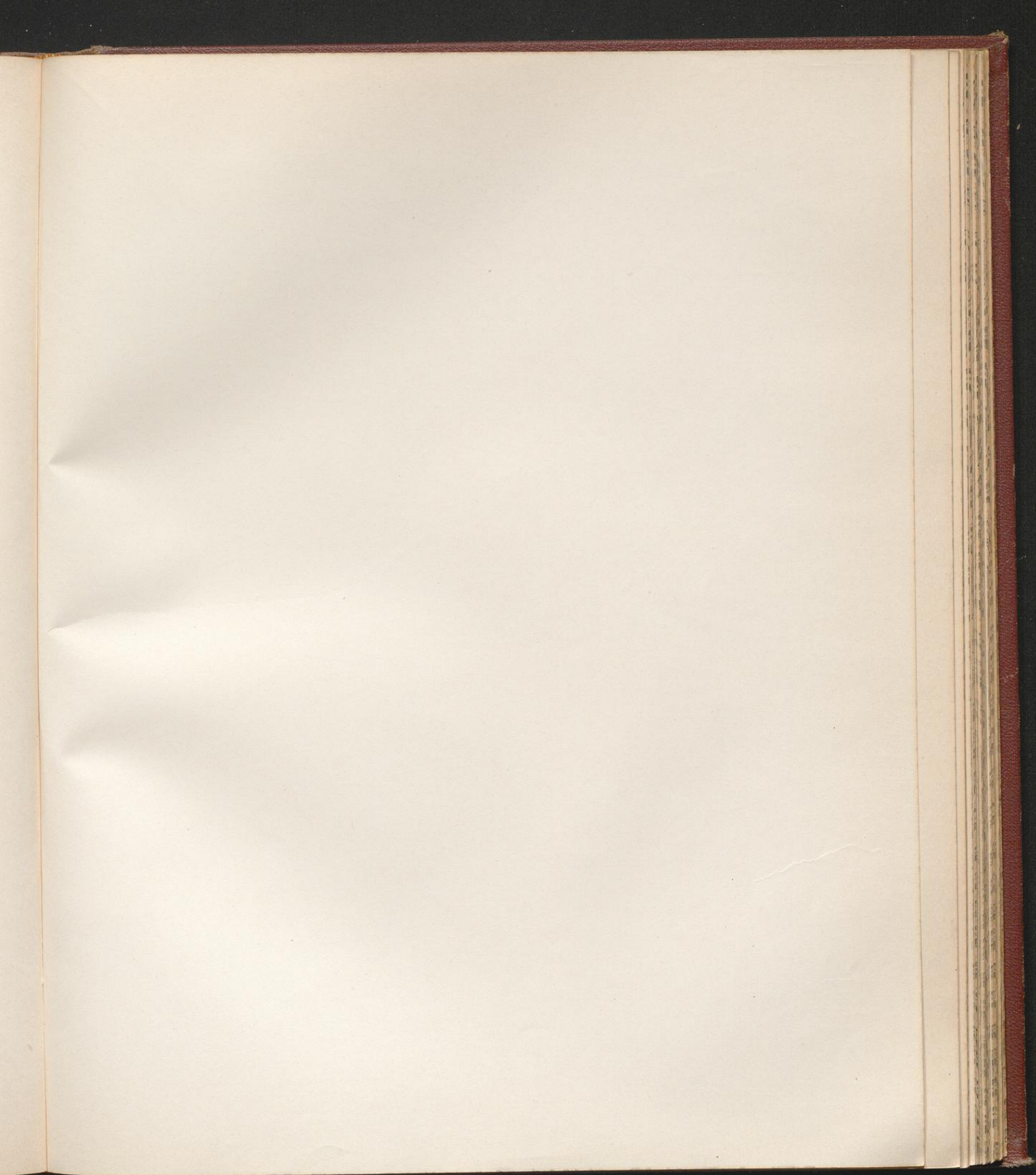


Halle über der Vorfahrt zu Bahnhof Alexanderplatz Berlin.









Halle des Bahnhofes Altstadt zu Dresden.

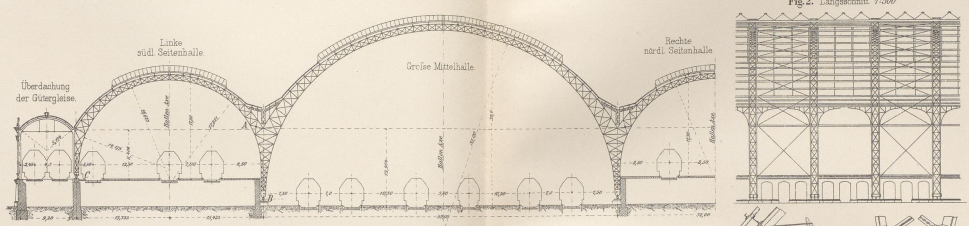


Fig. 1. Querschnitt 1:500

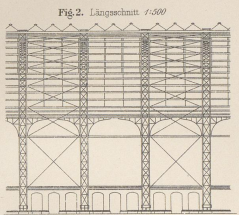


Fig. 2. Längsschnitt 1:500

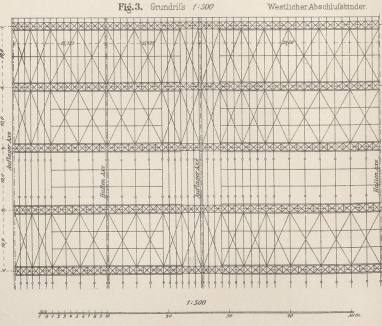


Fig. 3. Grundriß 1:500

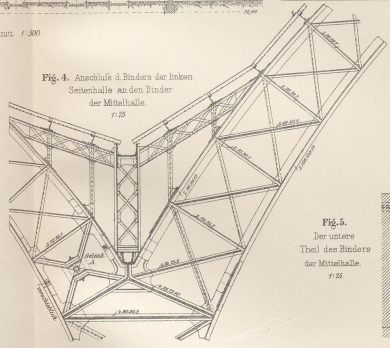


Fig. 4. Anschluß d. Binders der linken Seitenhalle an den Binder der Mittelhalle 1:25

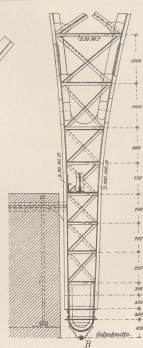
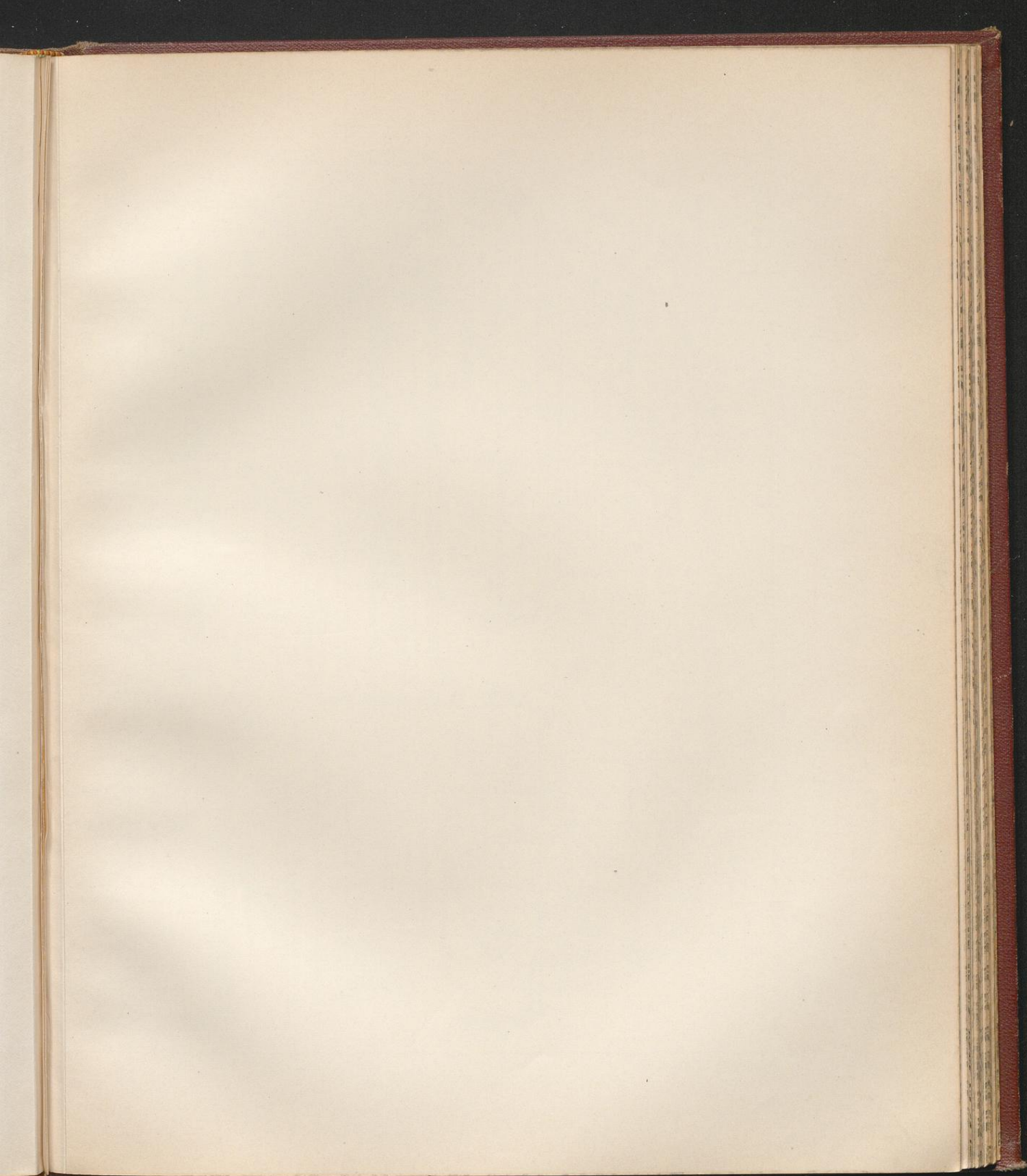
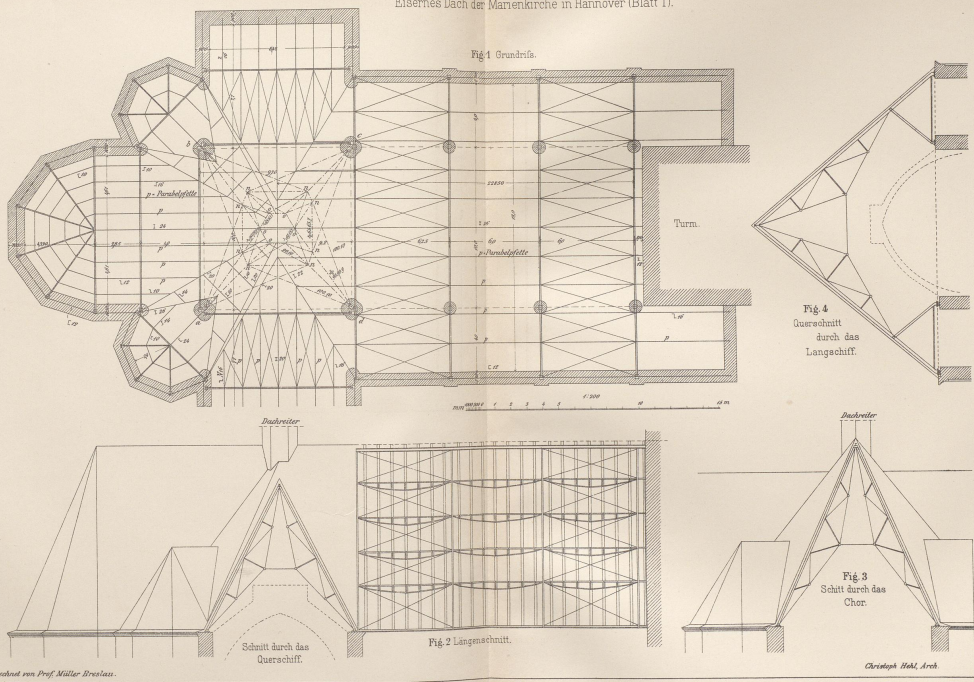


Fig. 5. Der untere Teil des Binders der Mittelhalle 1:25



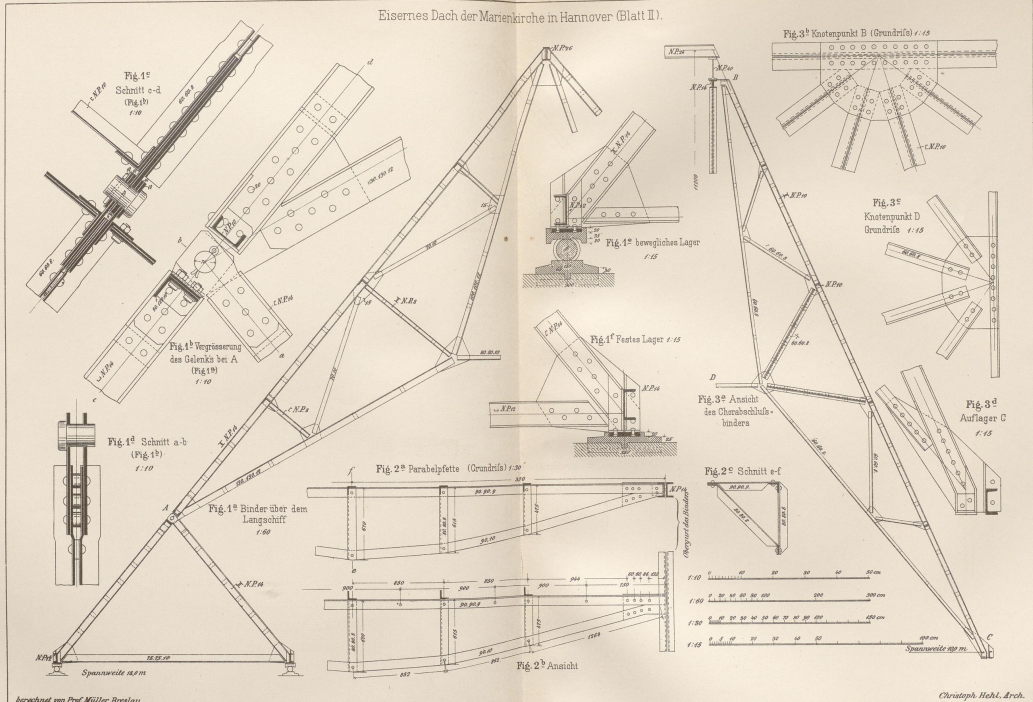
Eisernes Dach der Marienkirche in Hannover (Blatt 1).



Berechnet von Prof. Müller-Breslau.
Beymann & Eisen (6 Aufl.)

Christoph Hahl, Arch.
J.M. Gebhardt's Verlag, Leipzig

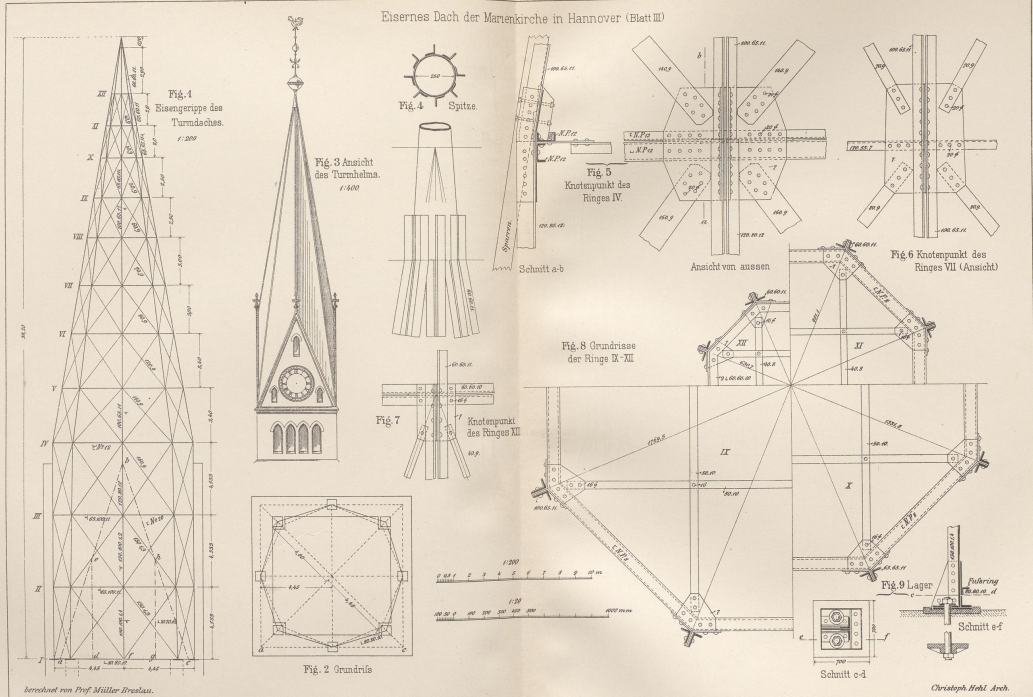
Eisernes Dach der Marienkirche in Hannover (Blatt II).



Entworfen von Prof. Müller-Breslau.
Beymann & Eisen, (G. Autl.)

Christoph. Hehl, Arch.
J.M. Gebhardt's Verlag, Leipzig

Eisernes Dach der Marienkirche in Hannover (Blatt II)



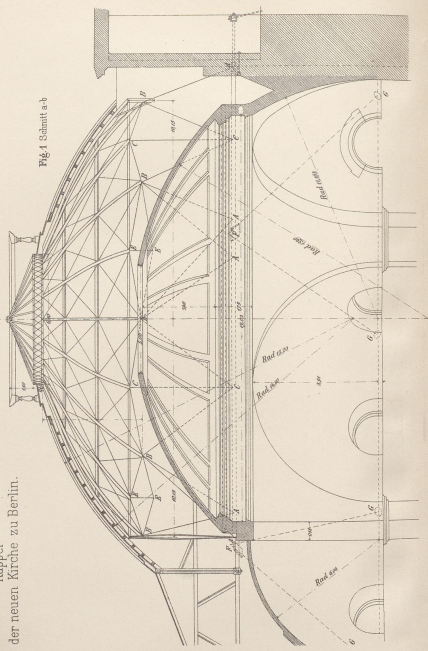
Berechnet von Prof. Müller Brunsau.

Breymann II Eisen 16. Aufl.

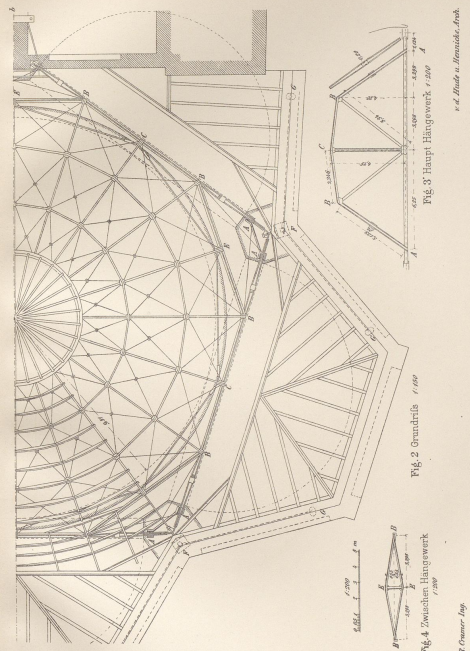
Christoph Hohl Arch.

J.M. Gebhardt's Verlag, Leipzig

Kuppel
der neuen Kirche zu Berlin.

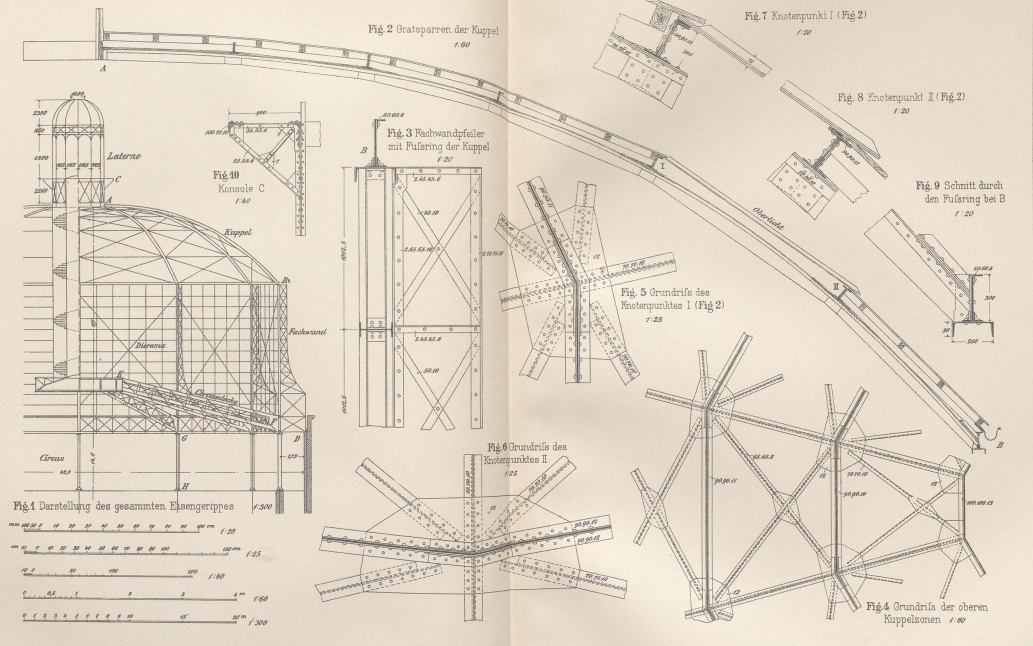


Beymann & Esen. (6. Aufl.)



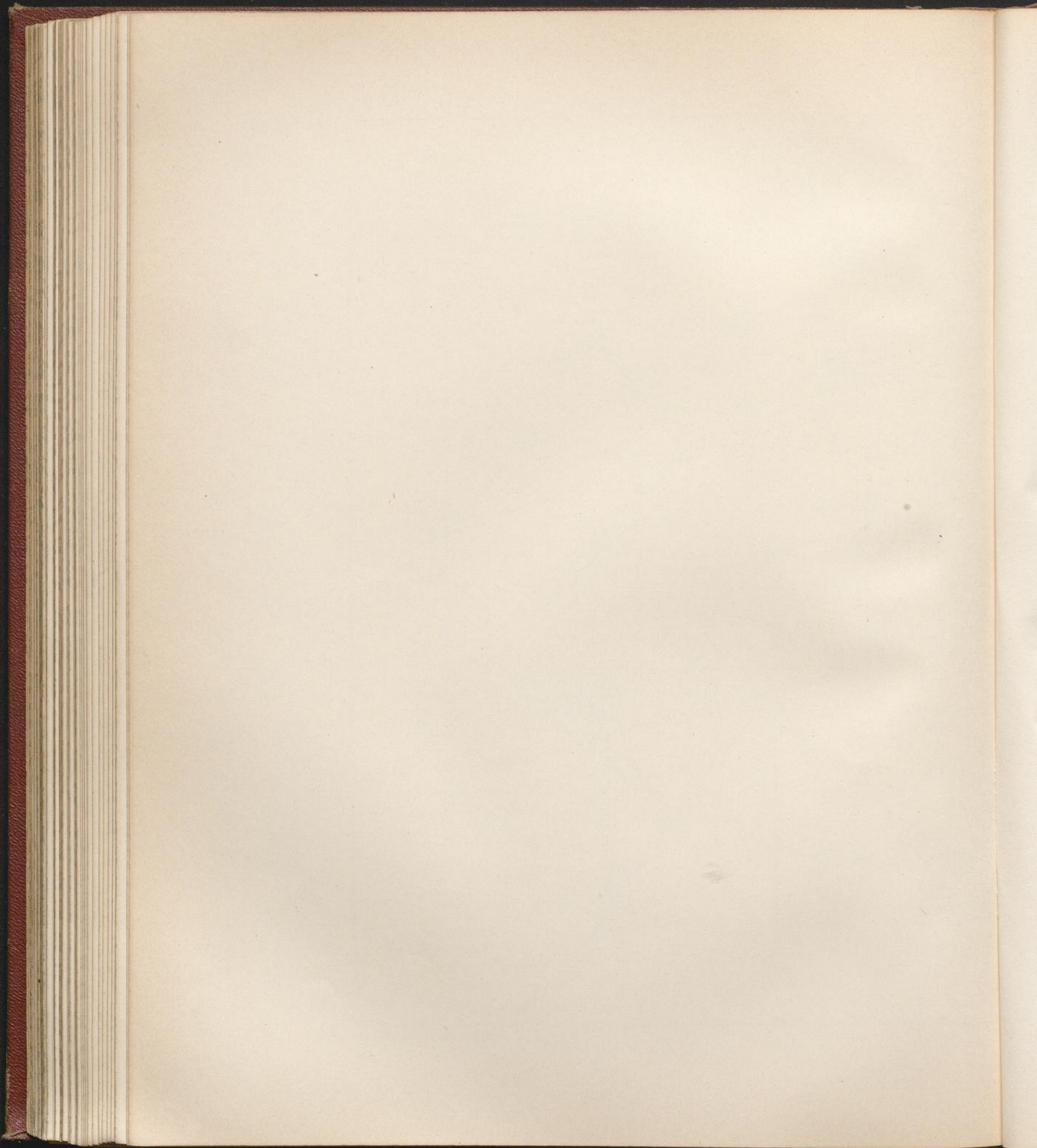
J.M. Gebhardt's Verlag, Leipzig.

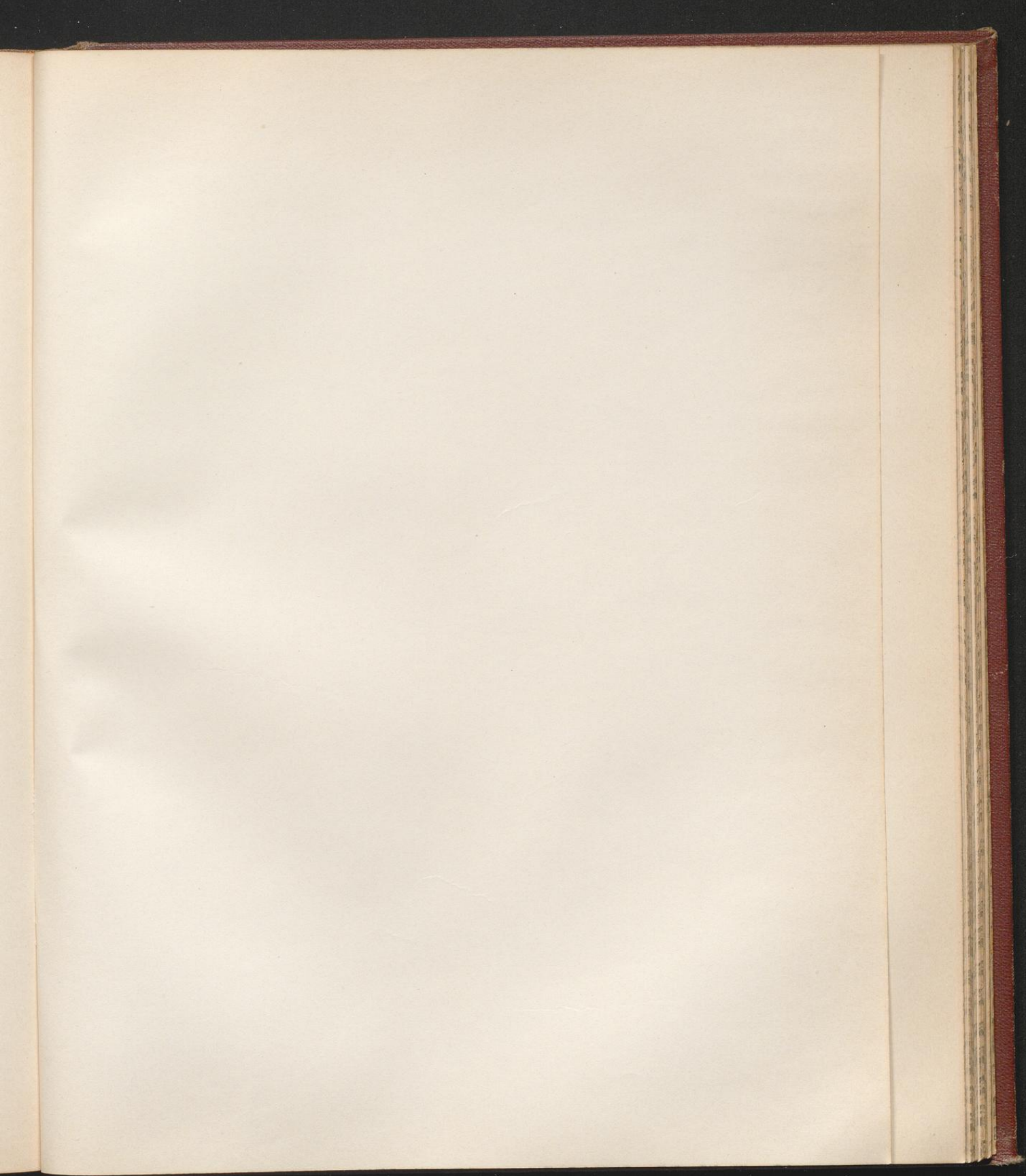
Alberthalle des Krystallpalastes in Leipzig Blatt I



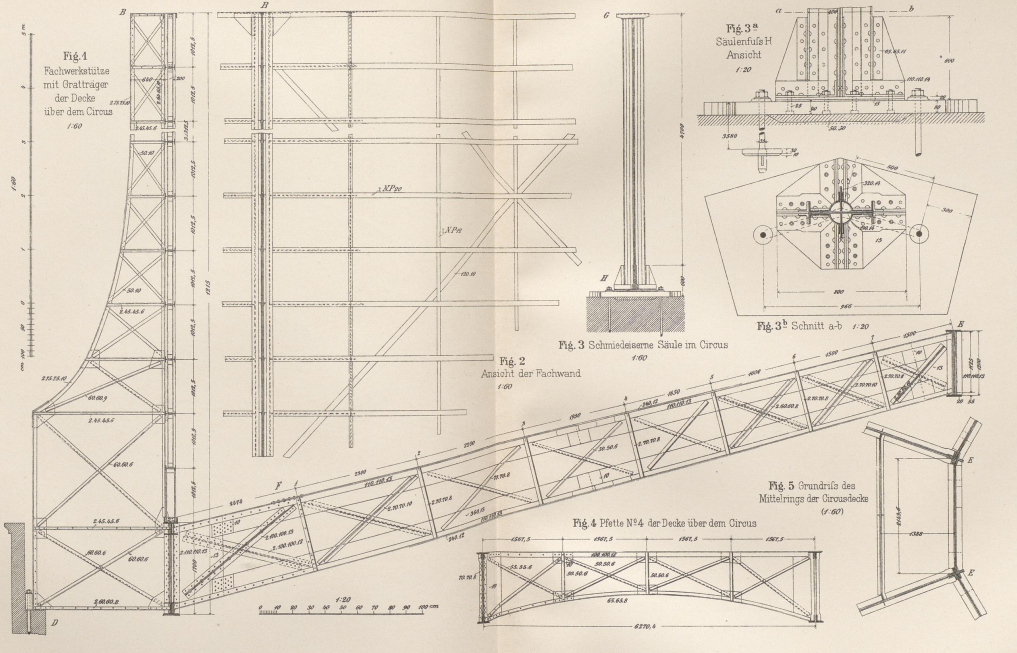
Königin Marienhütte Cainsdorf's conste.
Breyman II Eisen. (6. Aufl.)

A. Rybbach Arch.
J.M. Gebhardt's Verlag, Leipzig





Aberthale des Krystalpalastes in Leipzig. Blatt II.

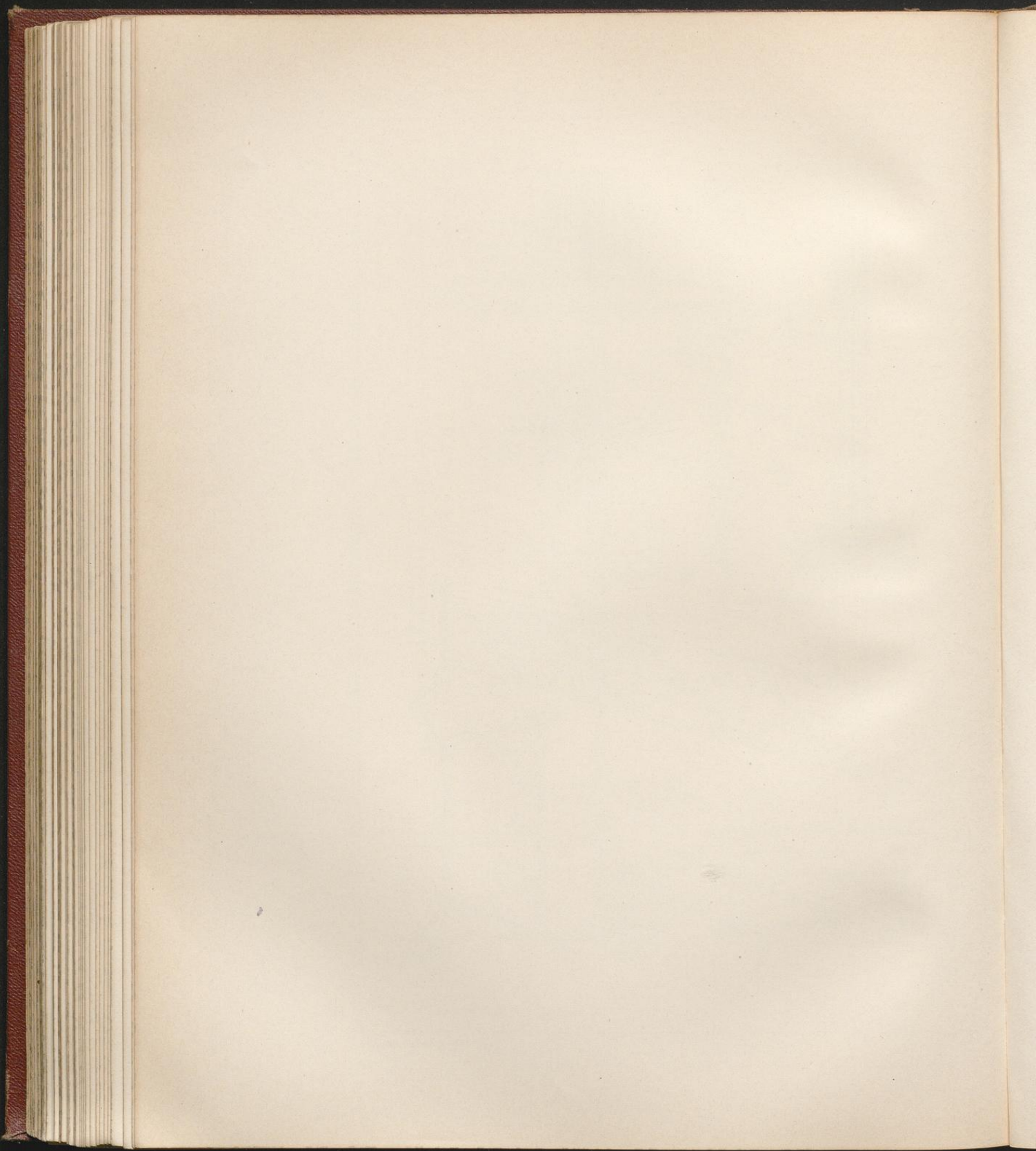


Königin Marien Hütte Canadort 1/2. censtr.

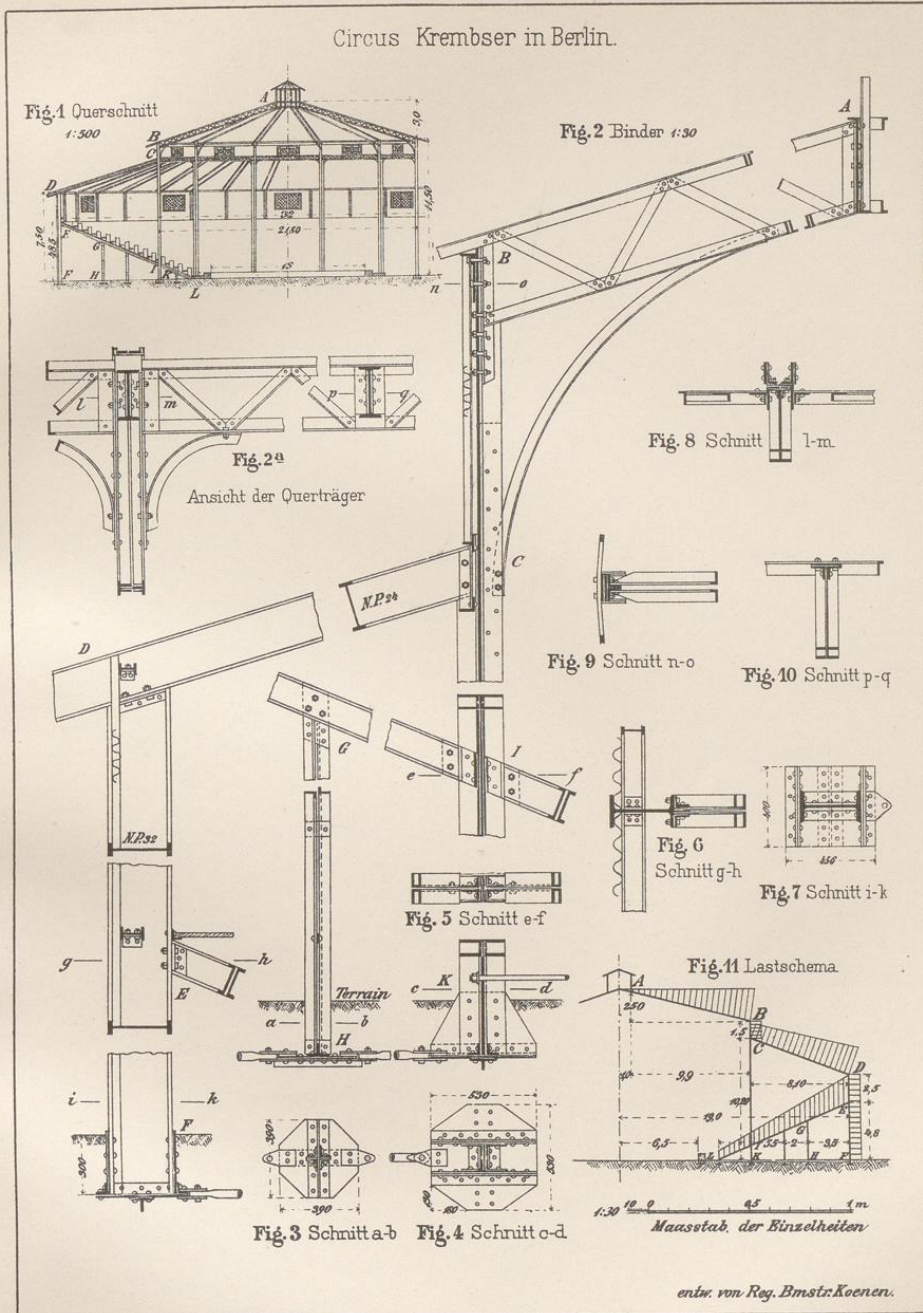
A. Rybsch Arch.

Breymann & Eisen (6. Aufl.)

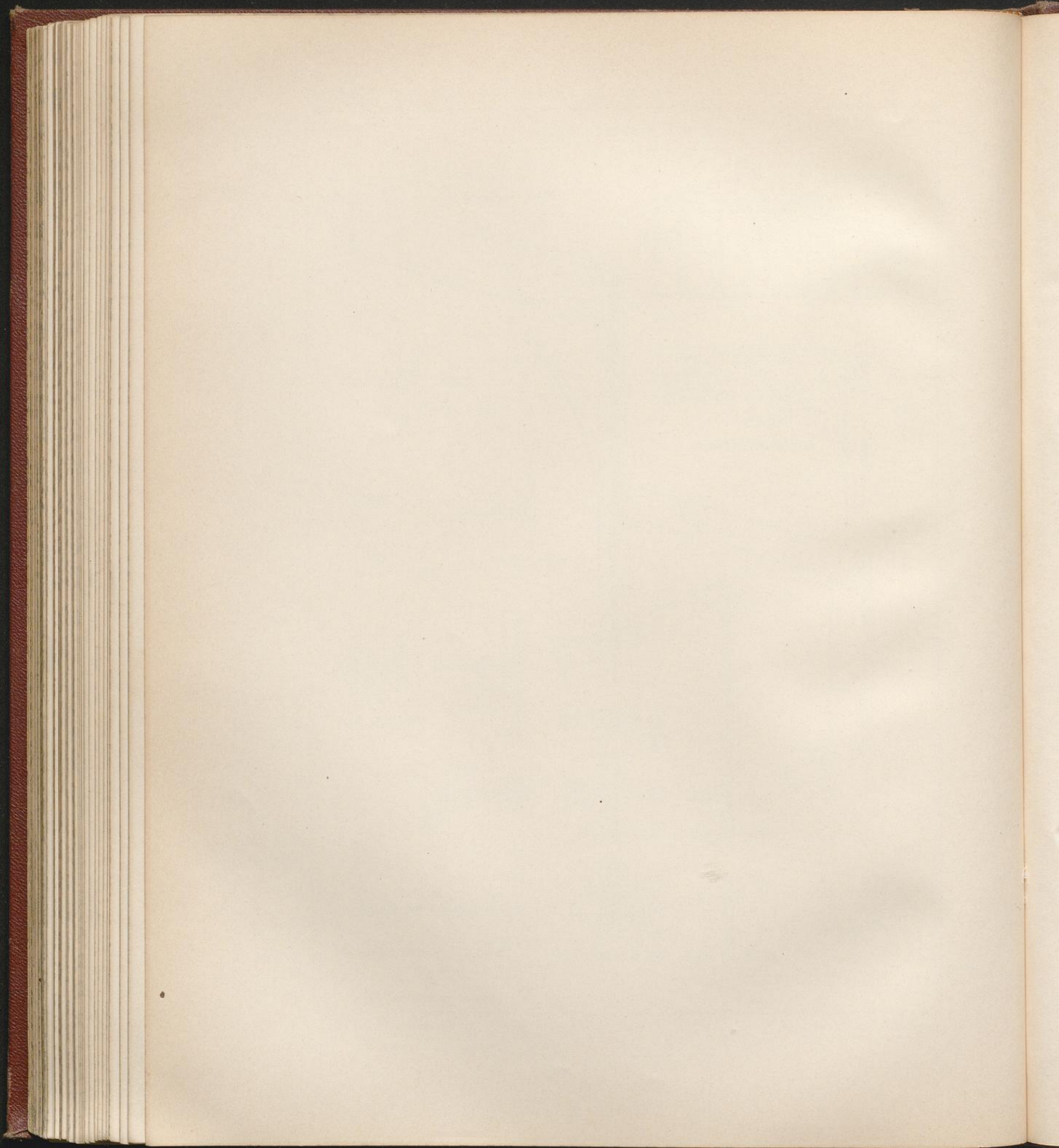
J.M. Gebhardt's Verlag, Leipzig.

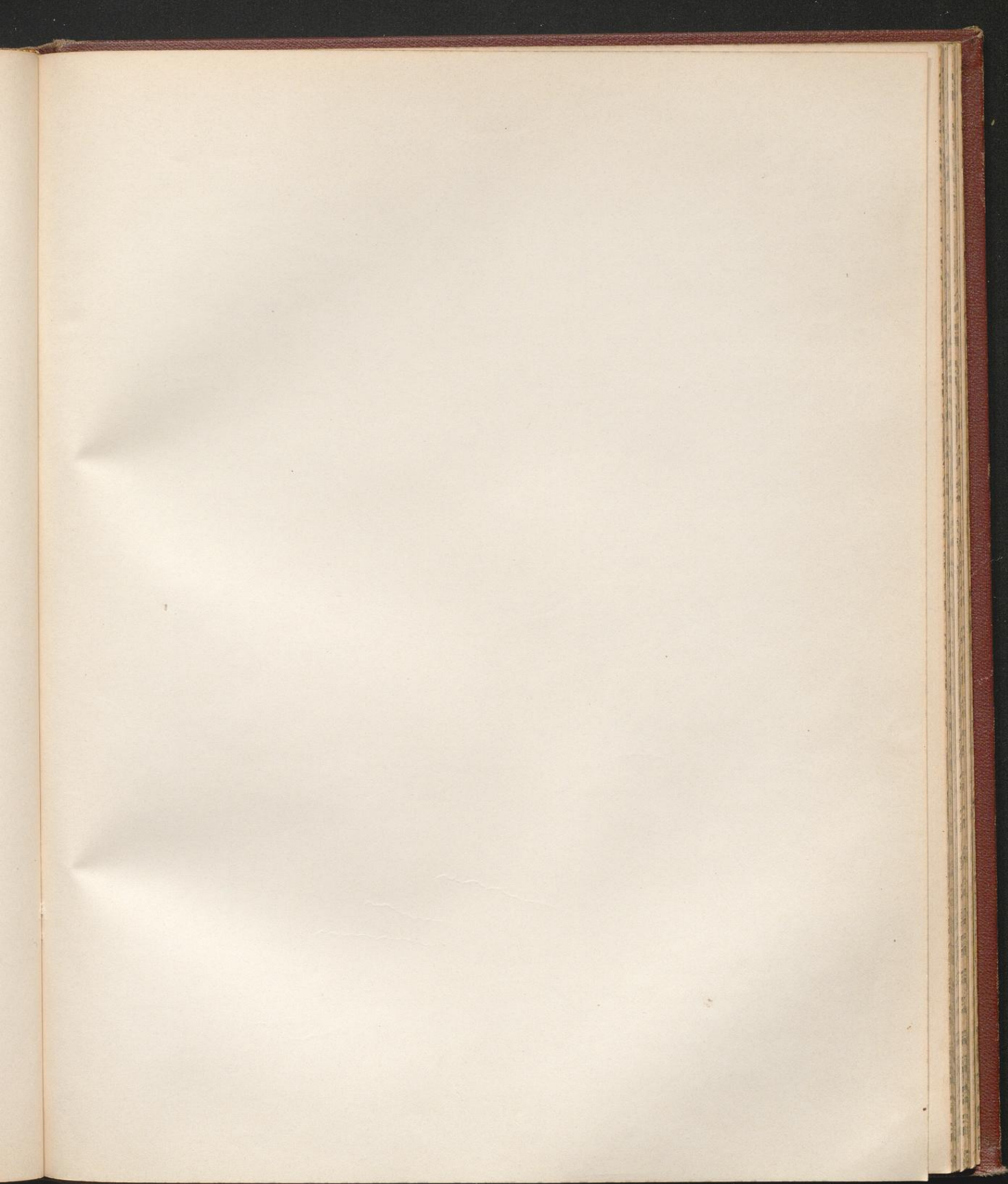


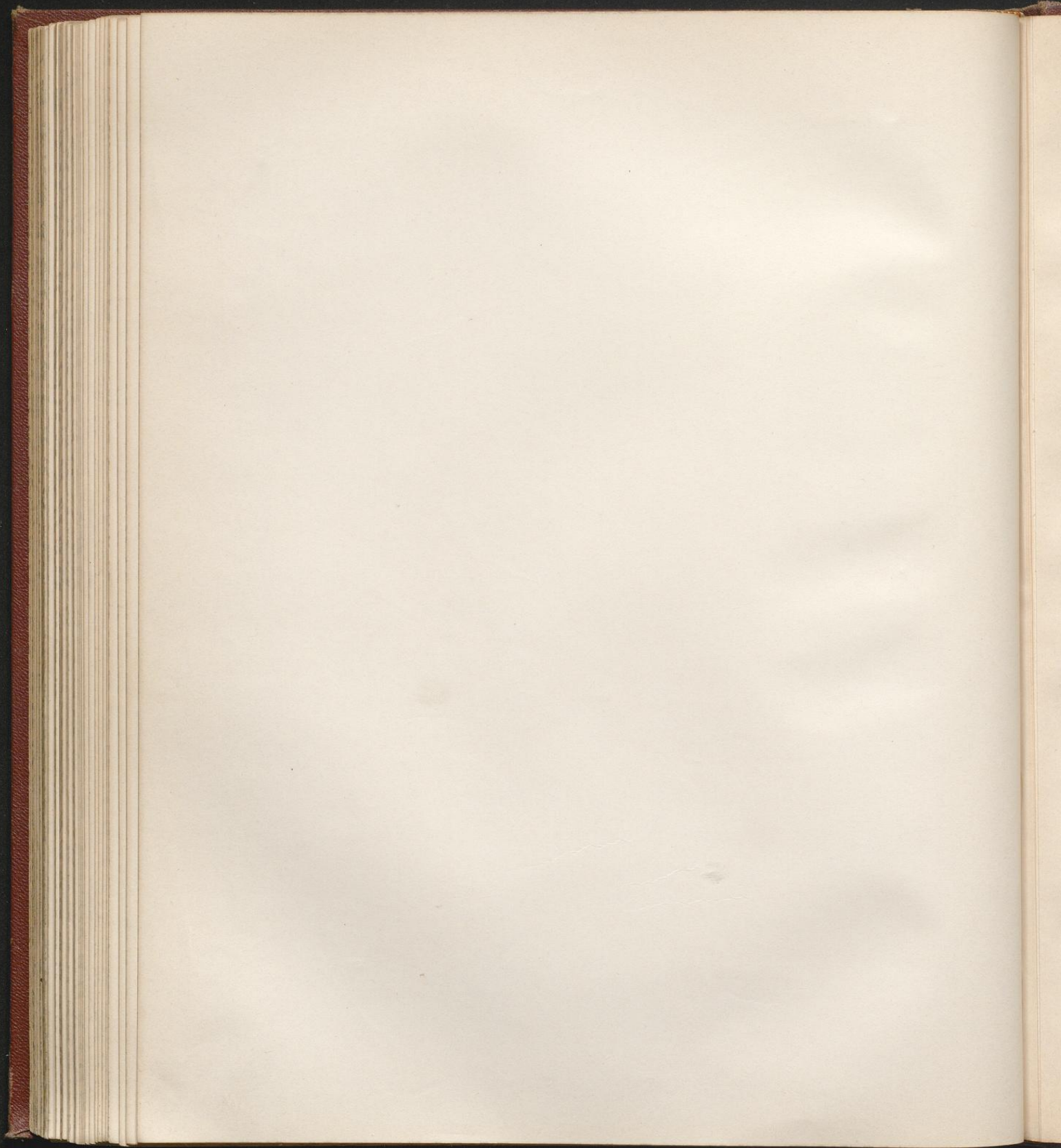
Circus Krembsler in Berlin.



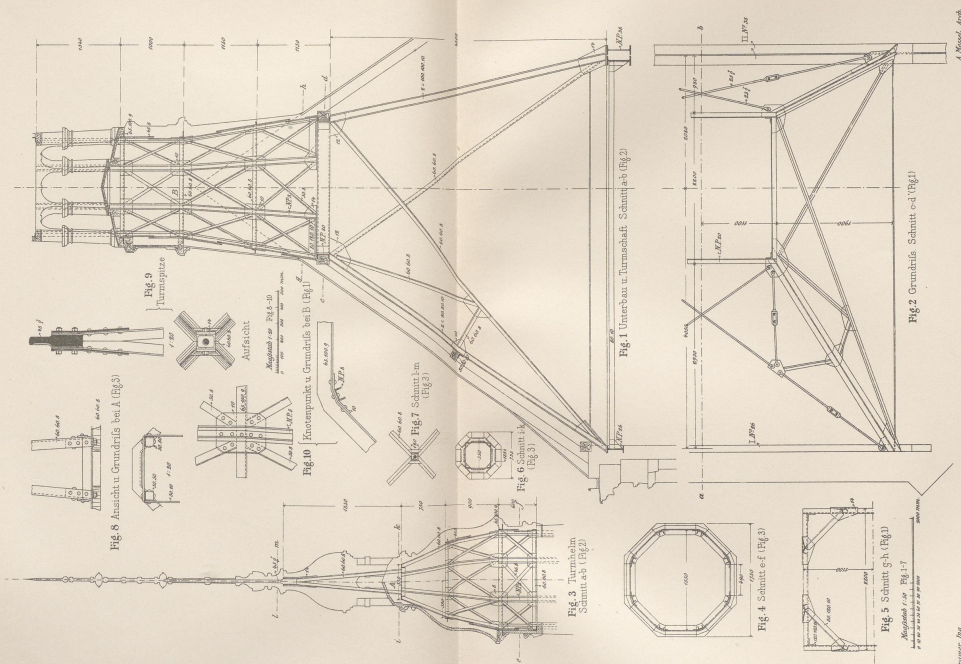
entw. von Reg. Bmstr. Koenen.







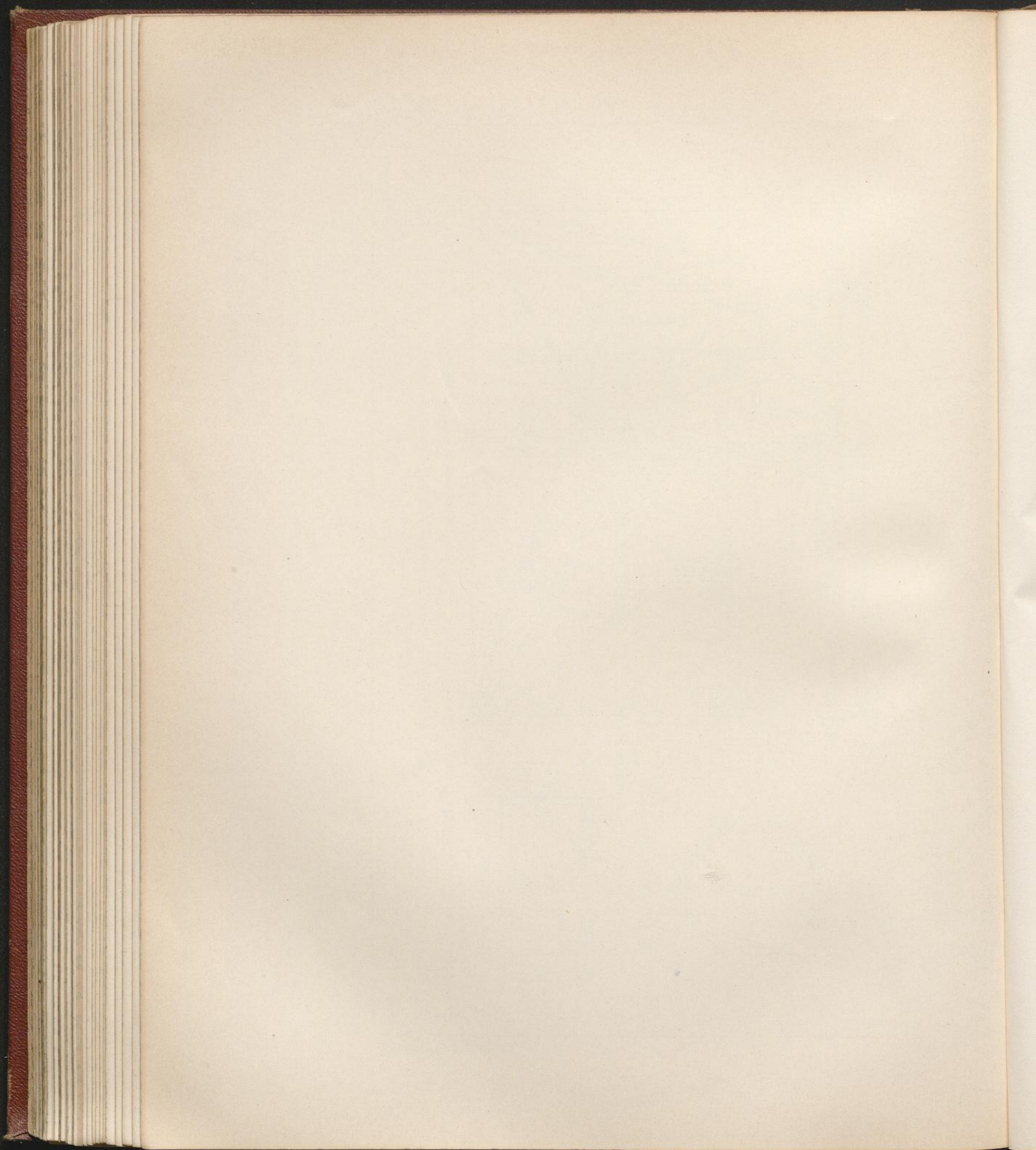
Eiserner Dachreiter
Geschäftshaus am Verder'schen Markt in Berlin.

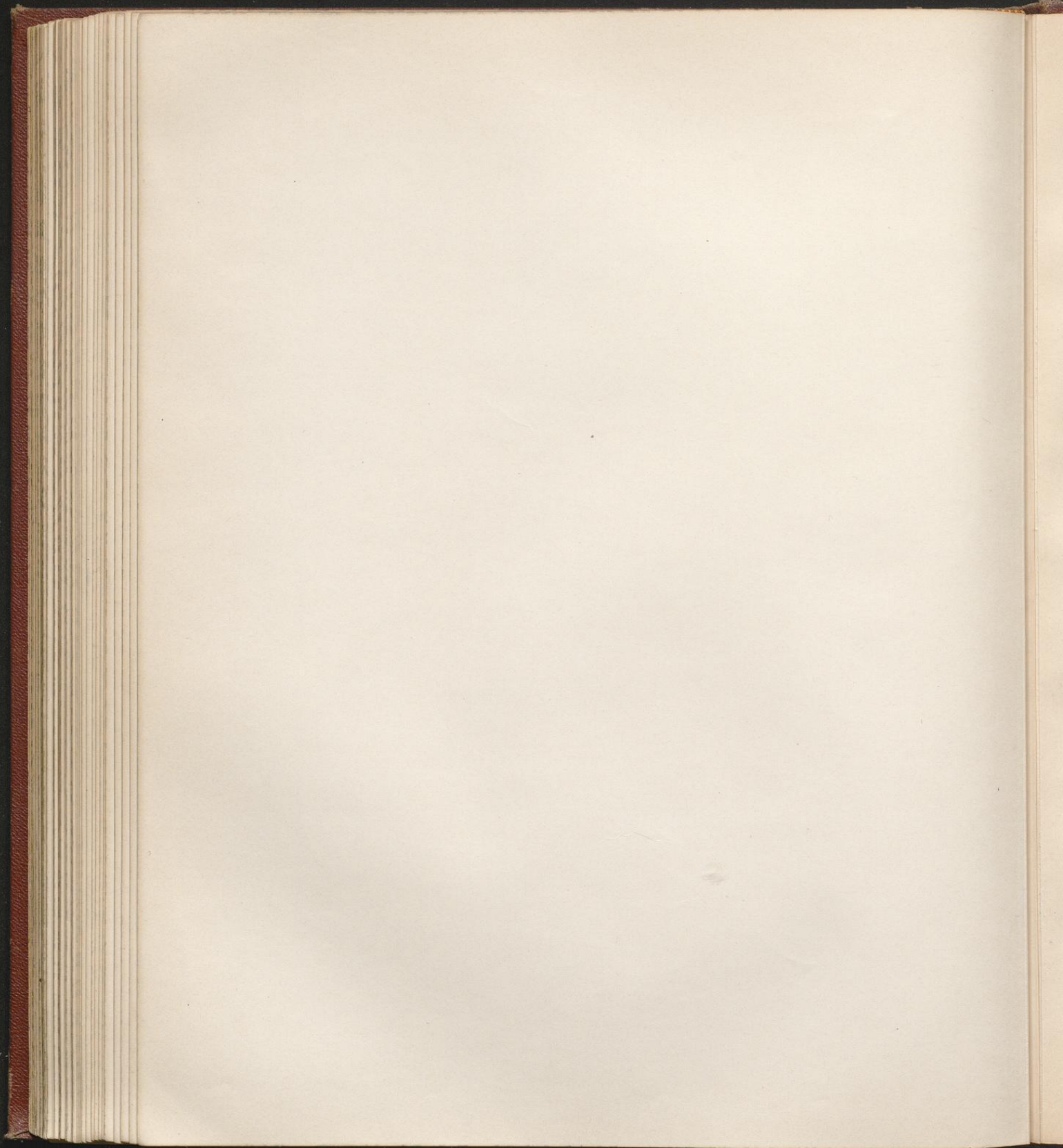


Beymann II Eisen (6. Aufl.)

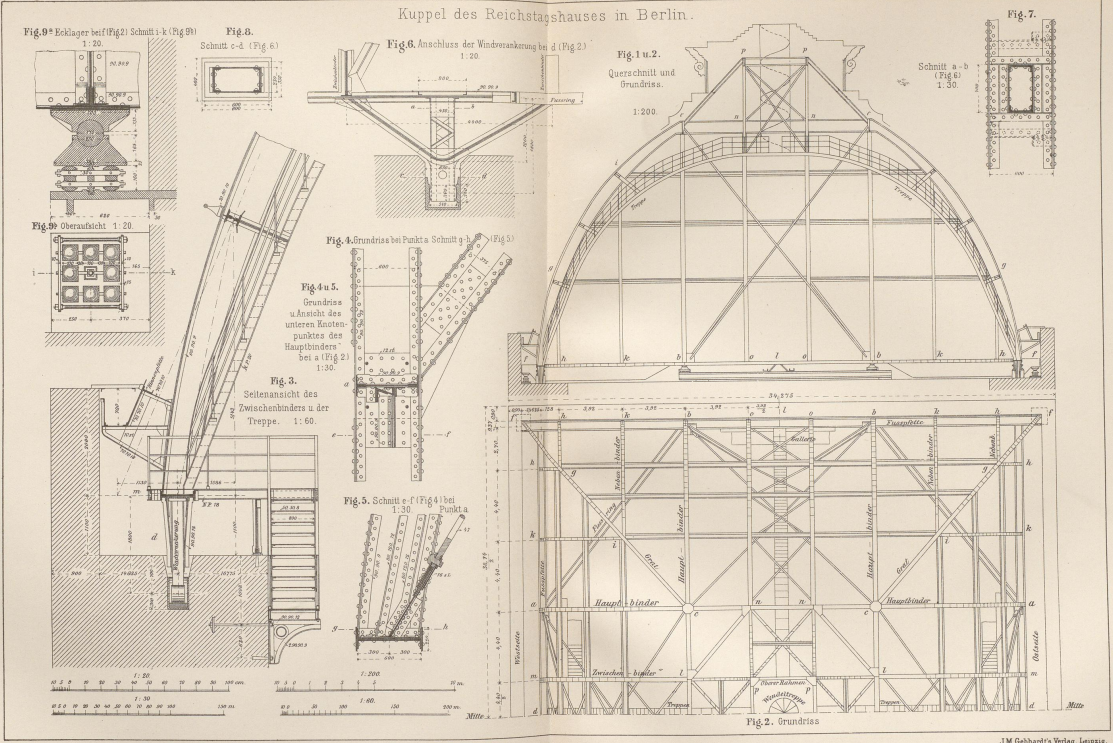
J.M. Gebhardt's Verlag, Leipzig

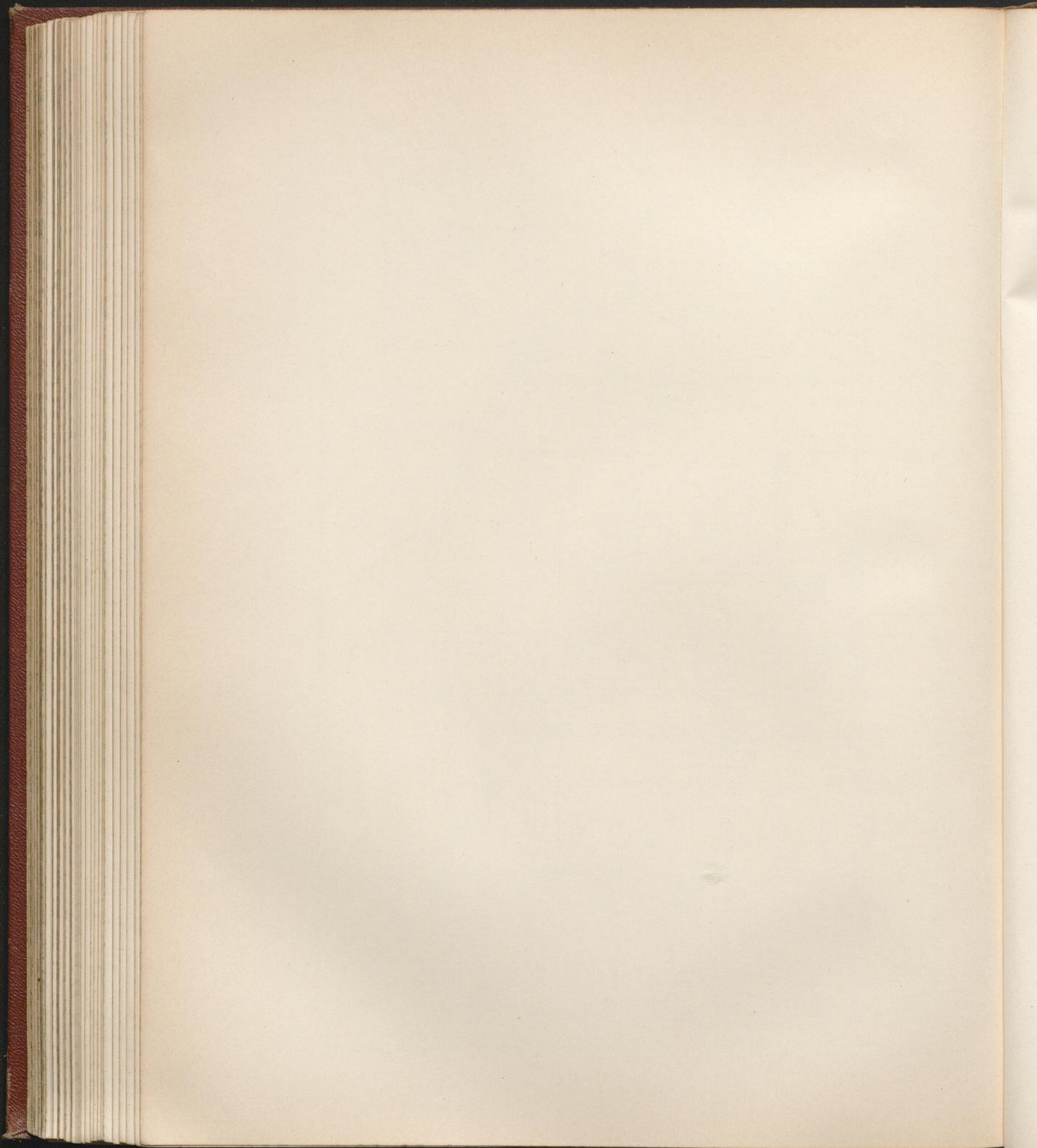
K. Grimmer, Arch.

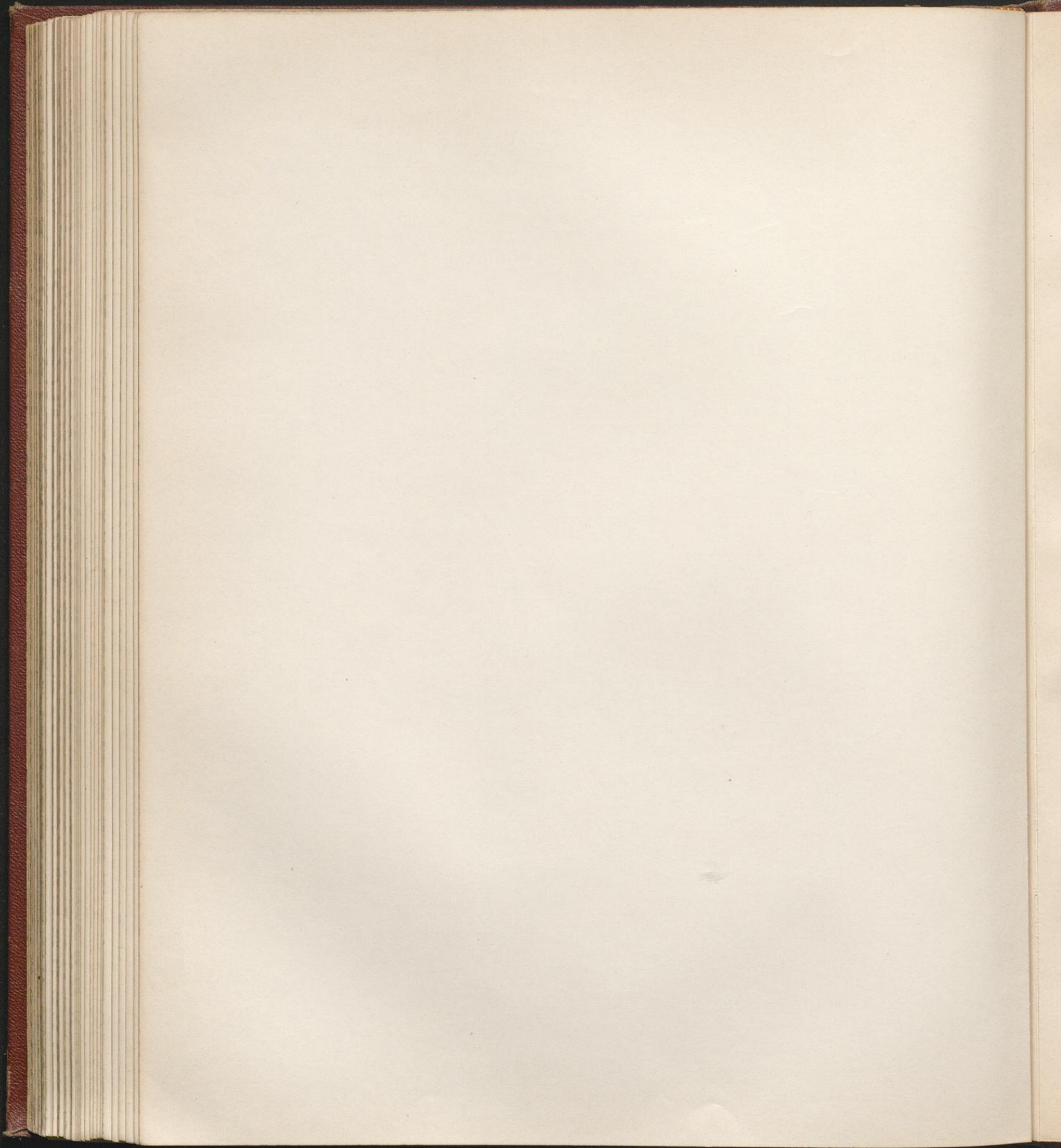


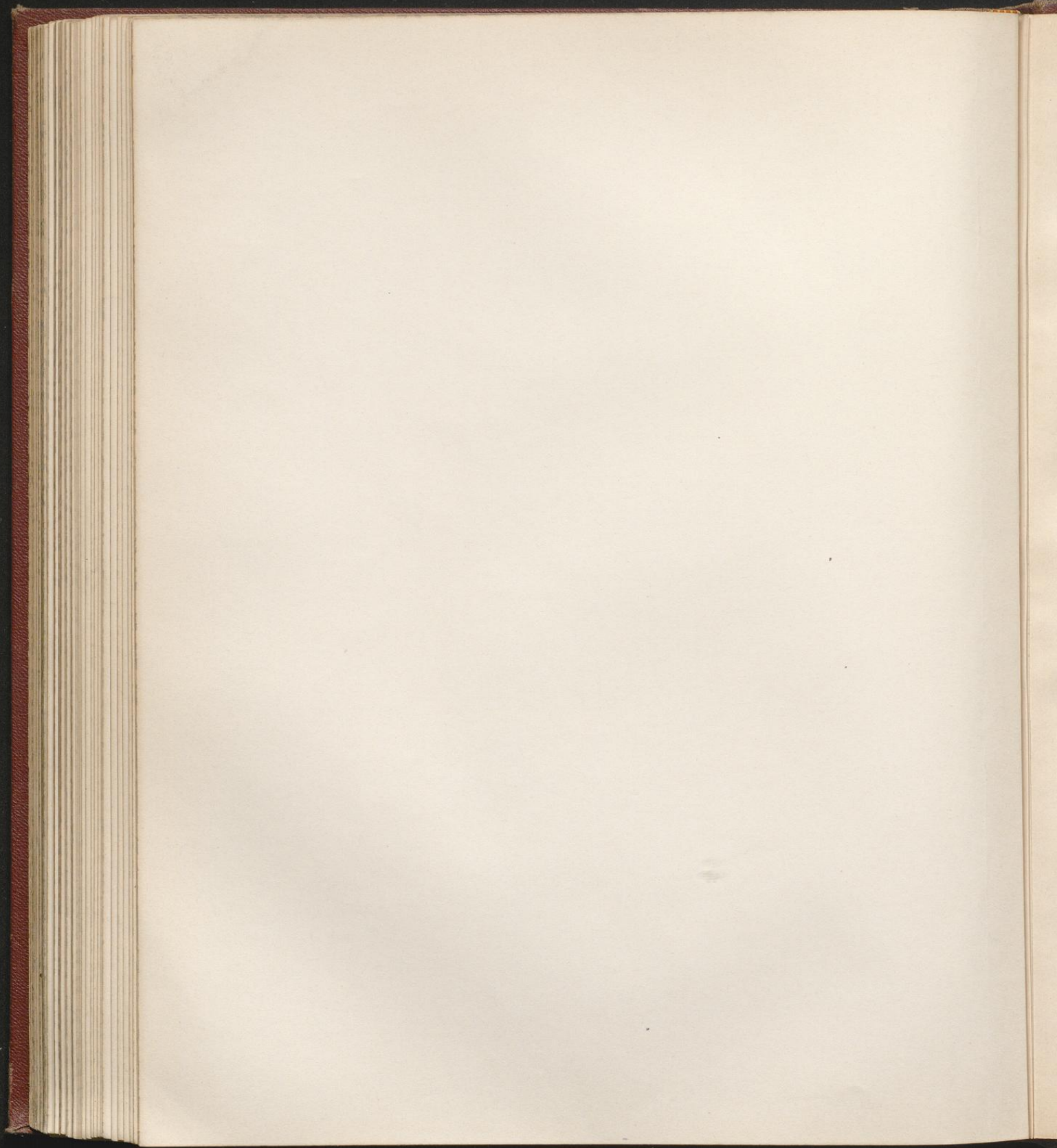


Kuppel des Reichstagshauses in Berlin.





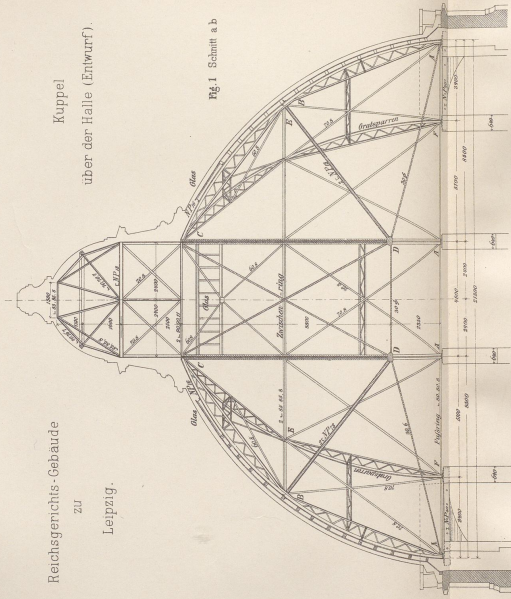




Reichsgerichts-Gebäude
zu
Leipzig.

Kuppel
über der Halle (Entwurf)

Fig. 1 Schnitt a b



Reymann II Eisen. (6. Aufl.)

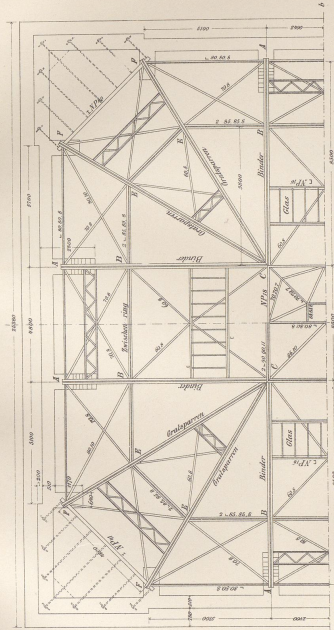


Fig. 2 Grundriß

L. Hoffmann Arch.

H. Cremer Arch.

J.M. Gebhardt's Verlag, Leipzig

Ausstellungsgebäude in Berlin

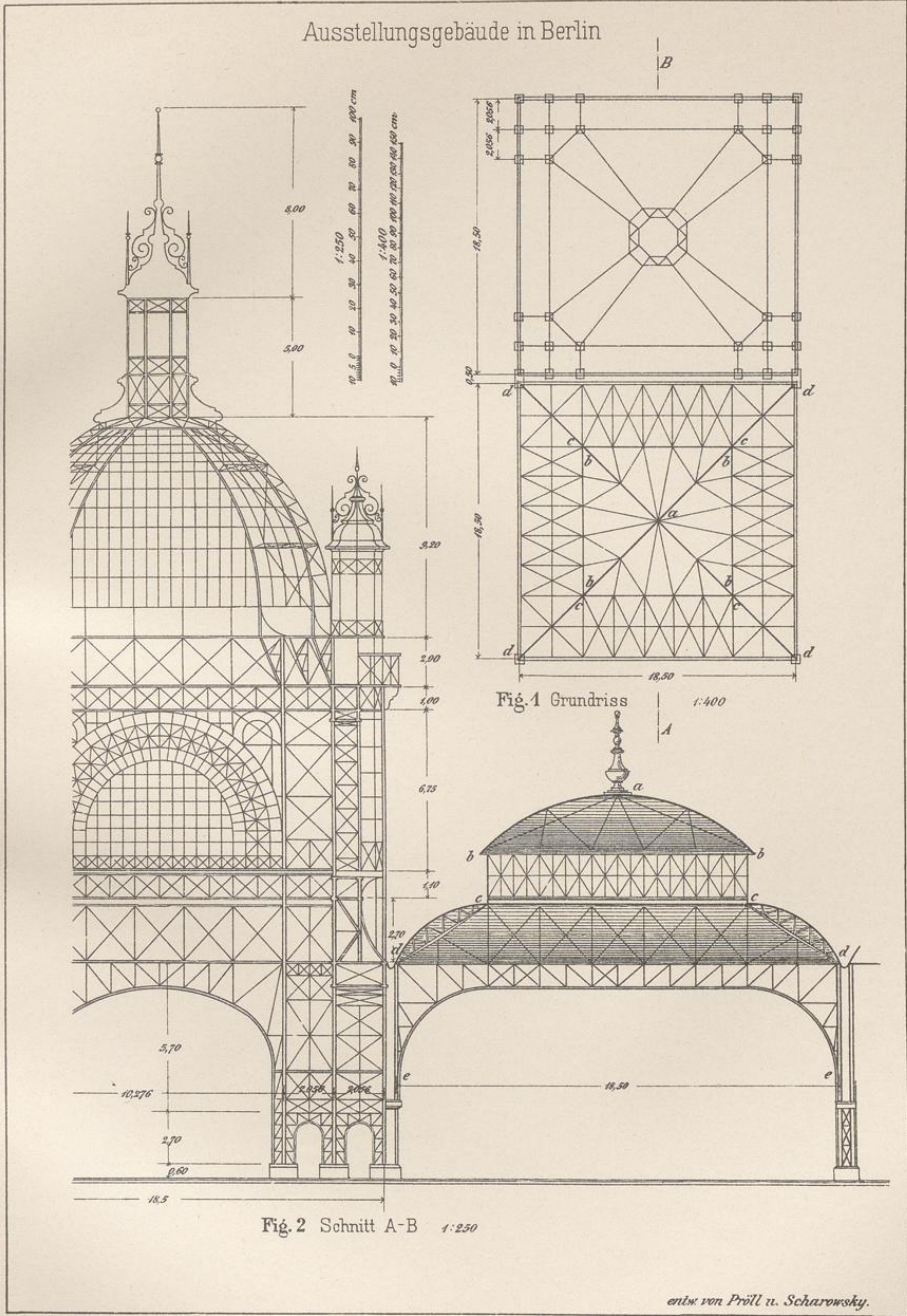


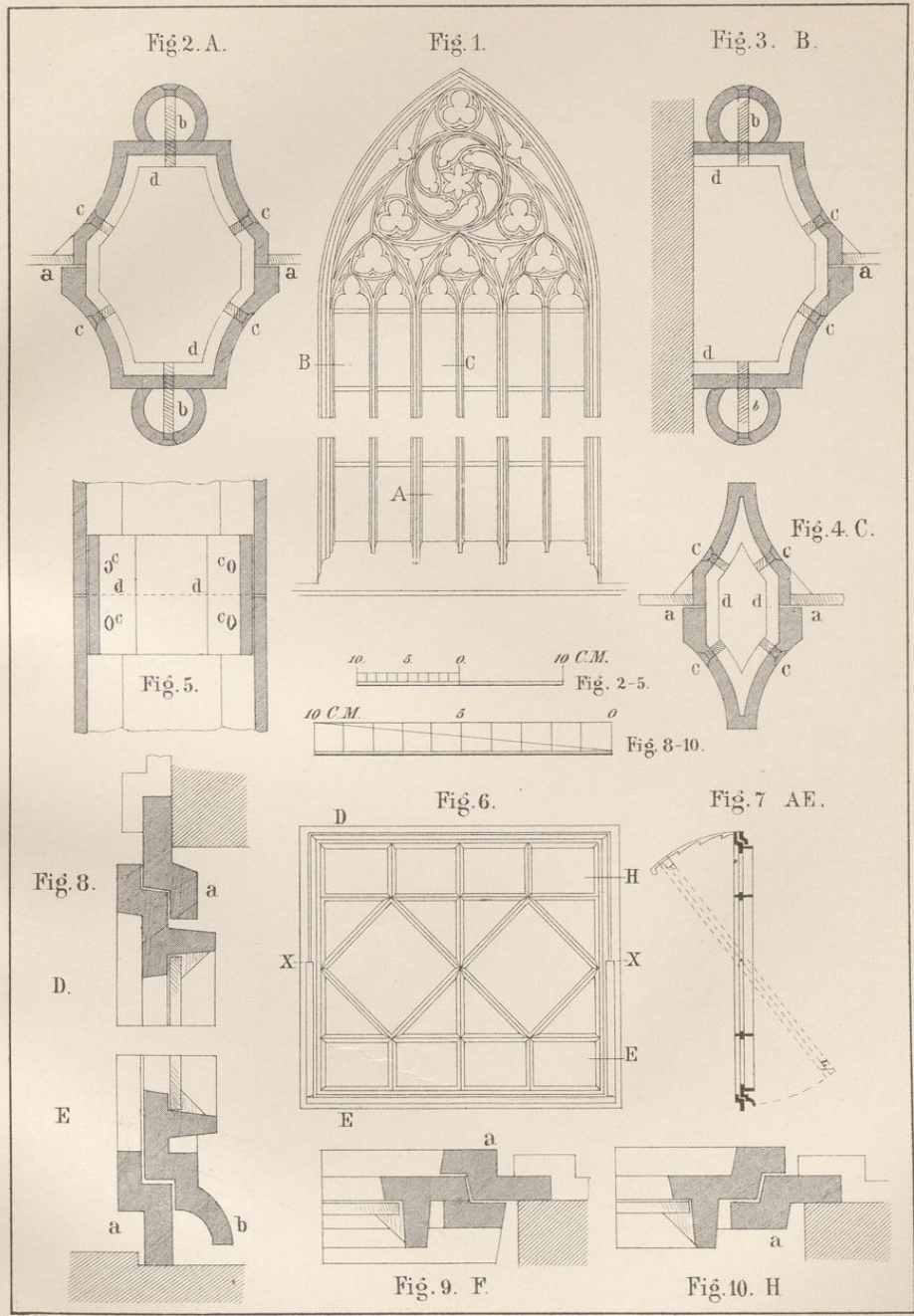
Fig. 2 Schnitt A-B 1:250

Fig. 1 Grundriss 1:400

entw. von Pröll u. Scharowsky.

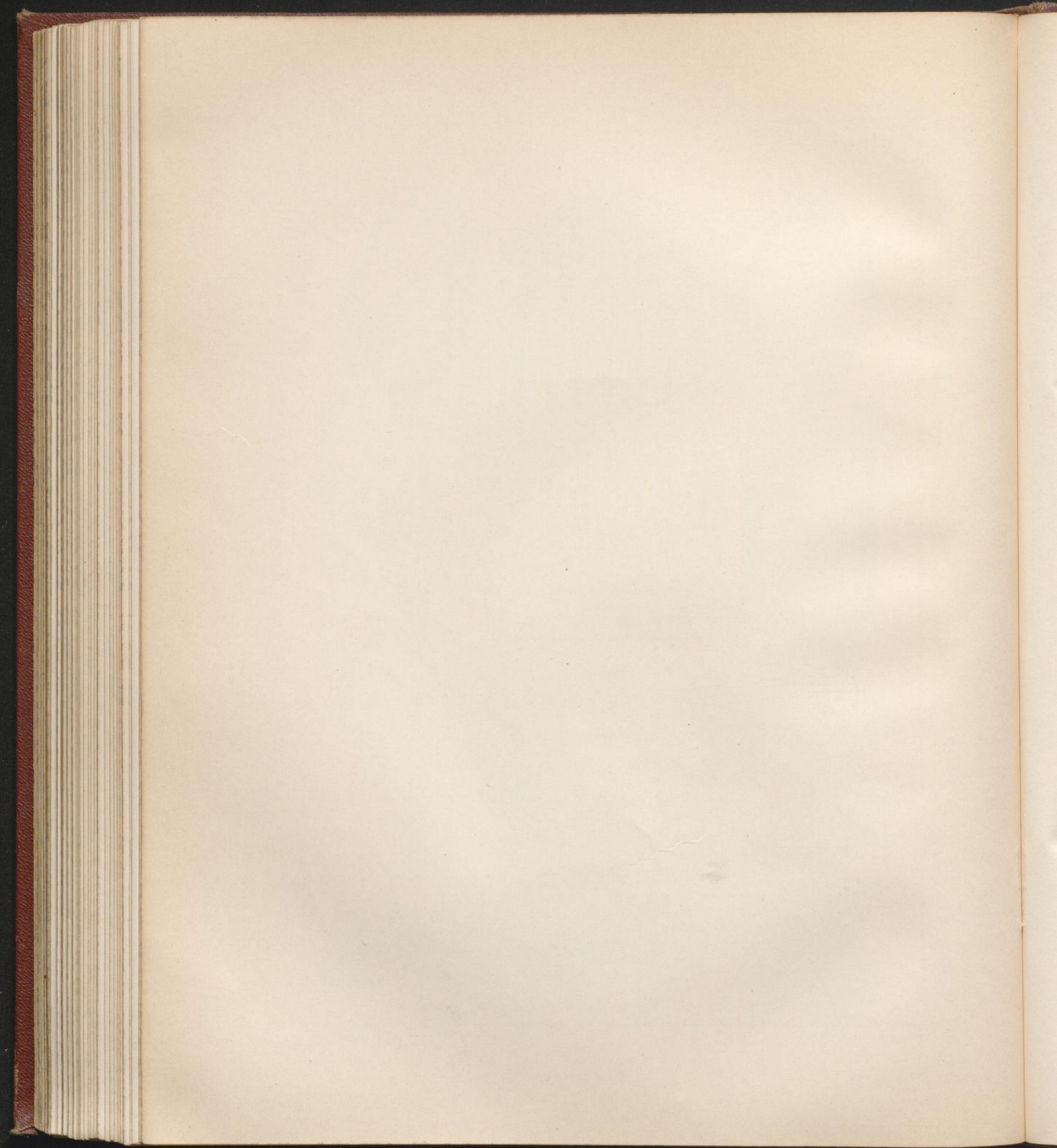
Breymann III Eisen (6. Aufl.)

J.M. Gebhardt's Verlag, Leipzig.

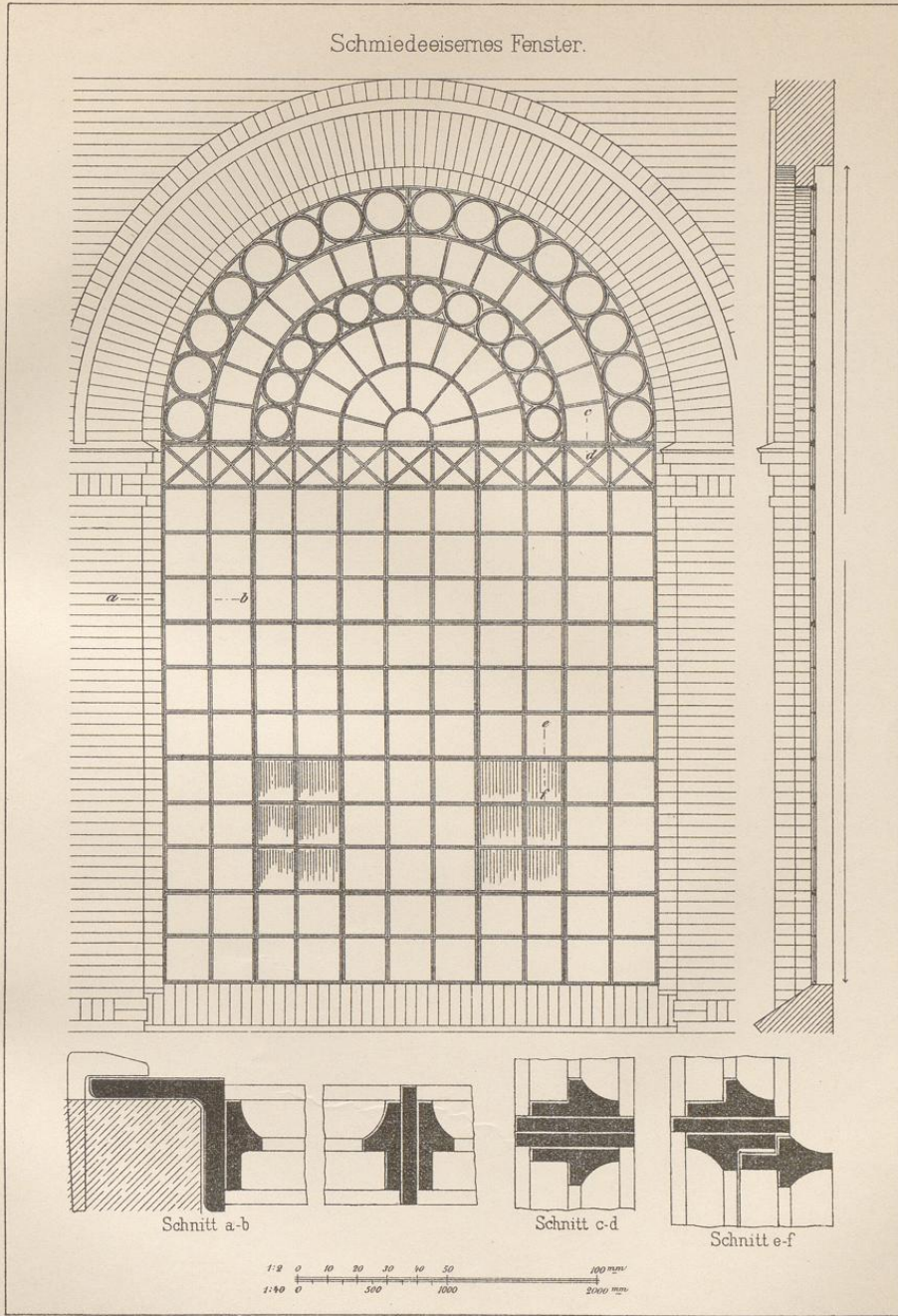


Breymann III Eisen (6. Aufl)

J.M. Gebhardt's Verlag, Leipzig.

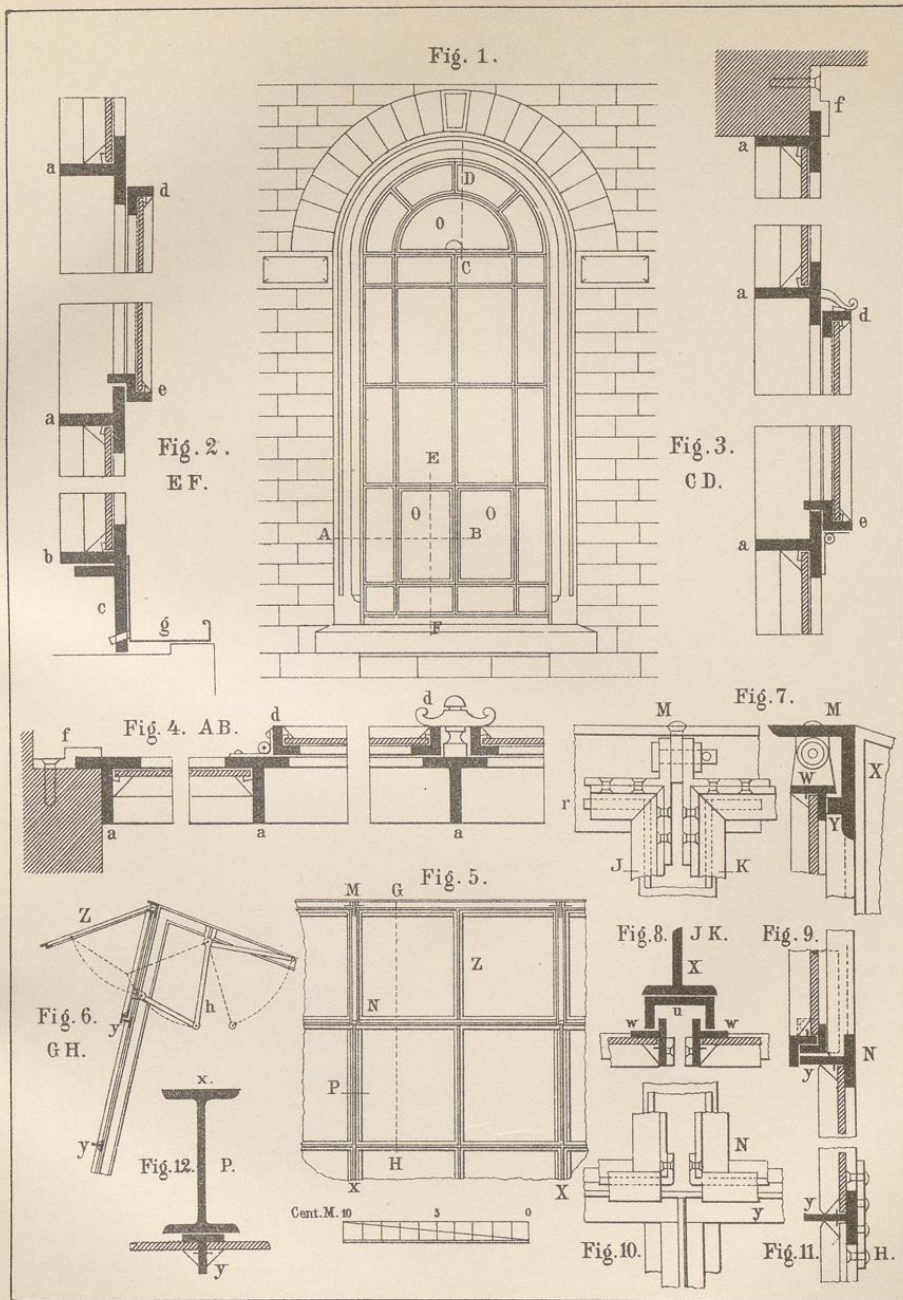


Schmiedeeisernes Fenster.

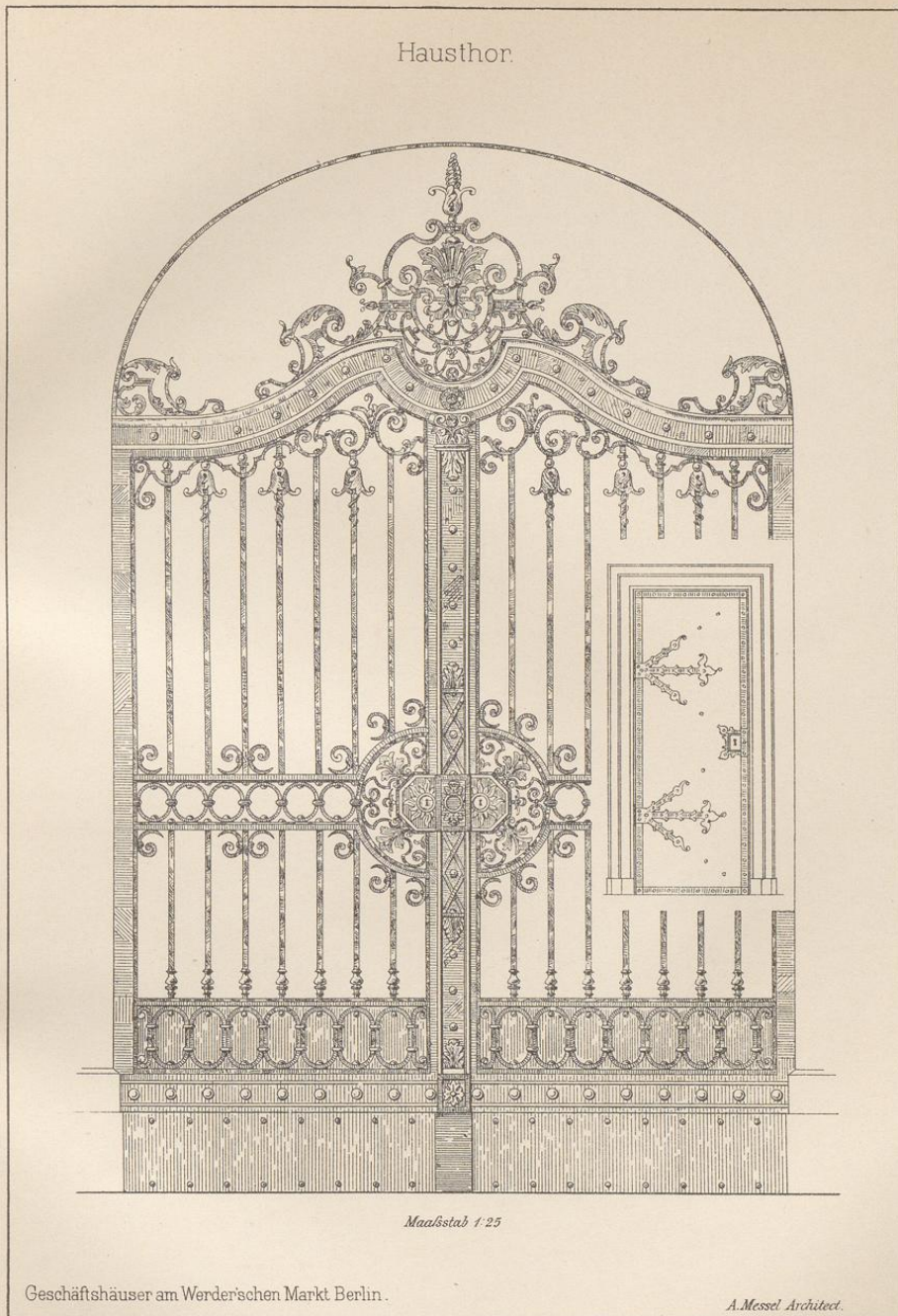


Breymann III Eisen (6. Aufl.)

J.M. Gebhardt's Verlag, Leipzig.



Hausthor.



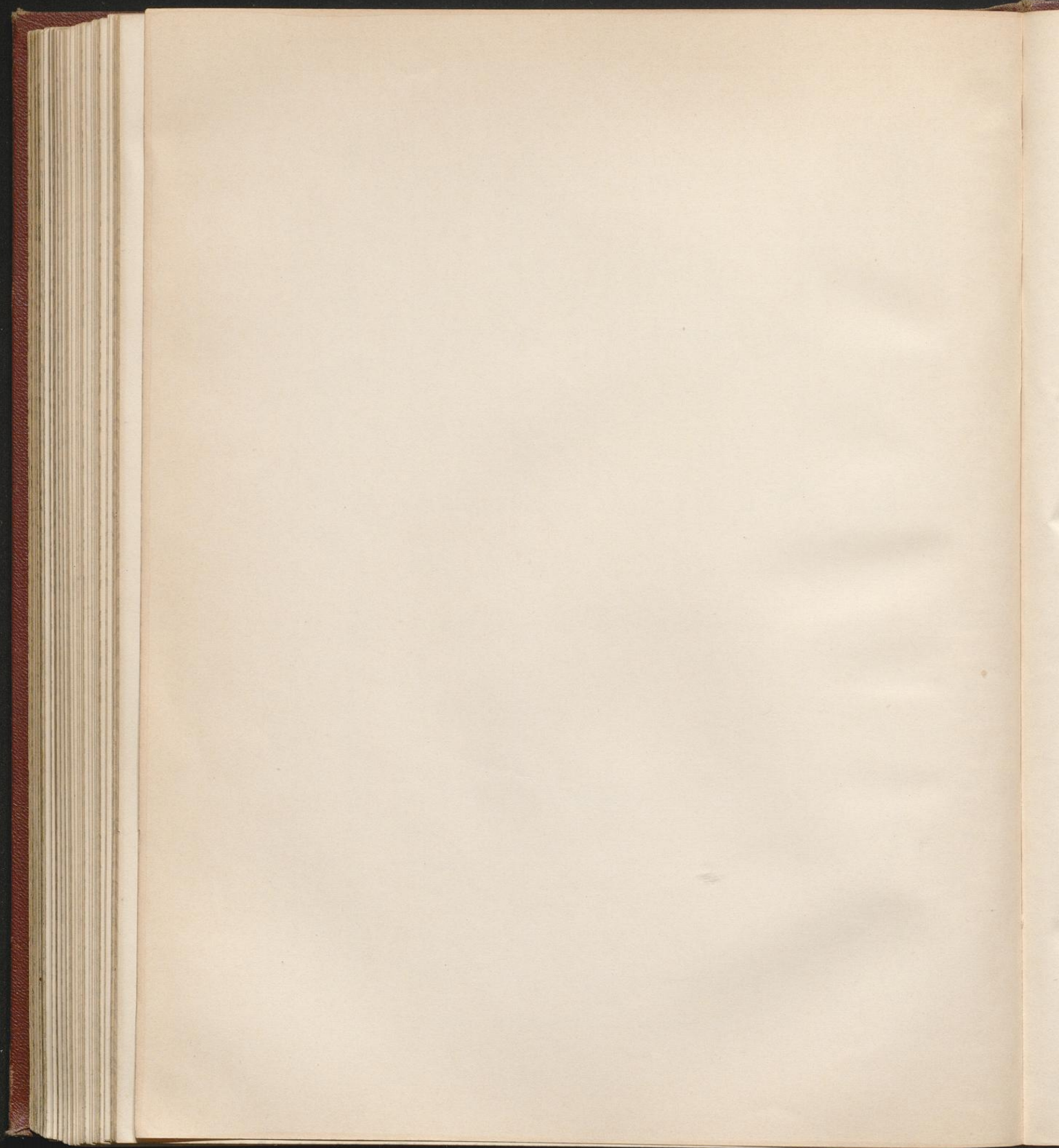
Maßstab 1:25

Geschäftshäuser am Werderschen Markt Berlin.

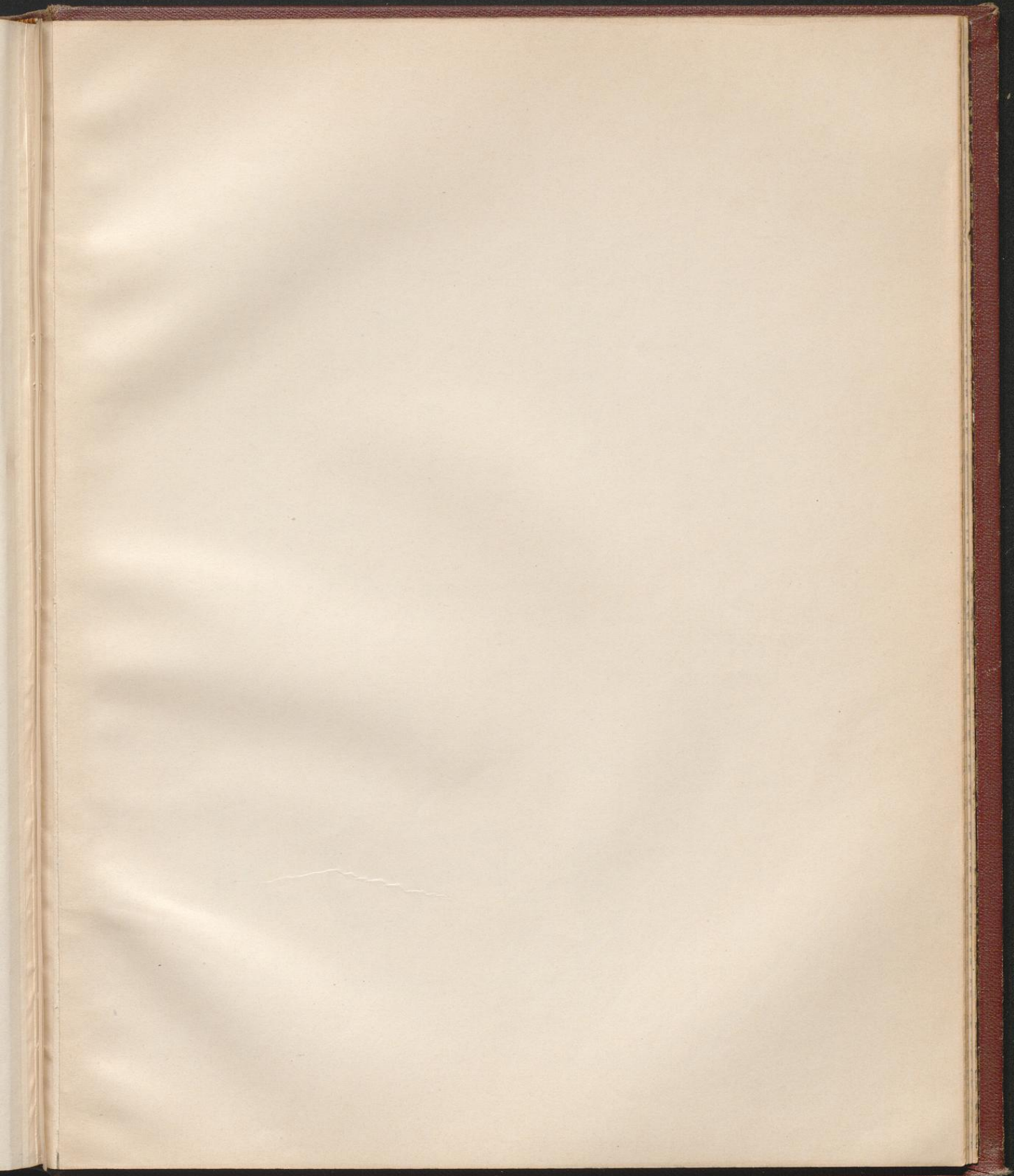
A. Messel Architect.

Breymann III Eisen (6. Aufl.)

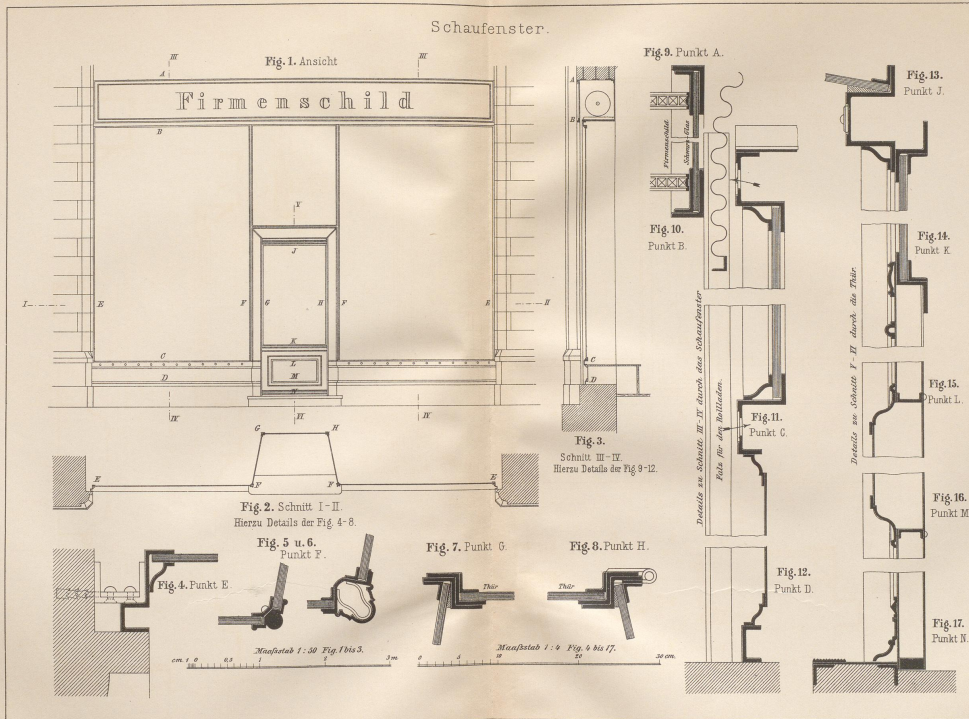
J.M. Gebhardt's Verlag, Leipzig.





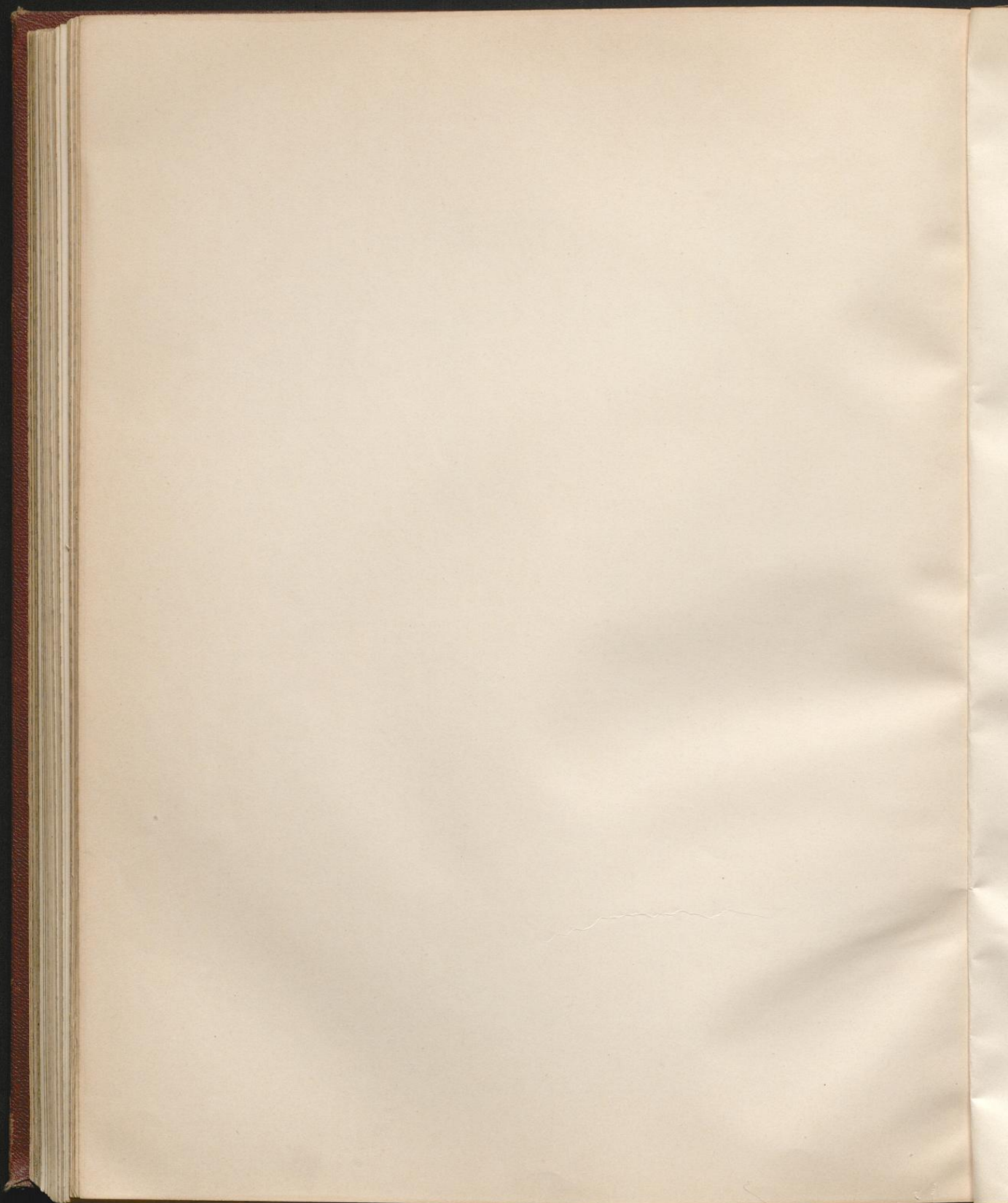


Schaufenster.



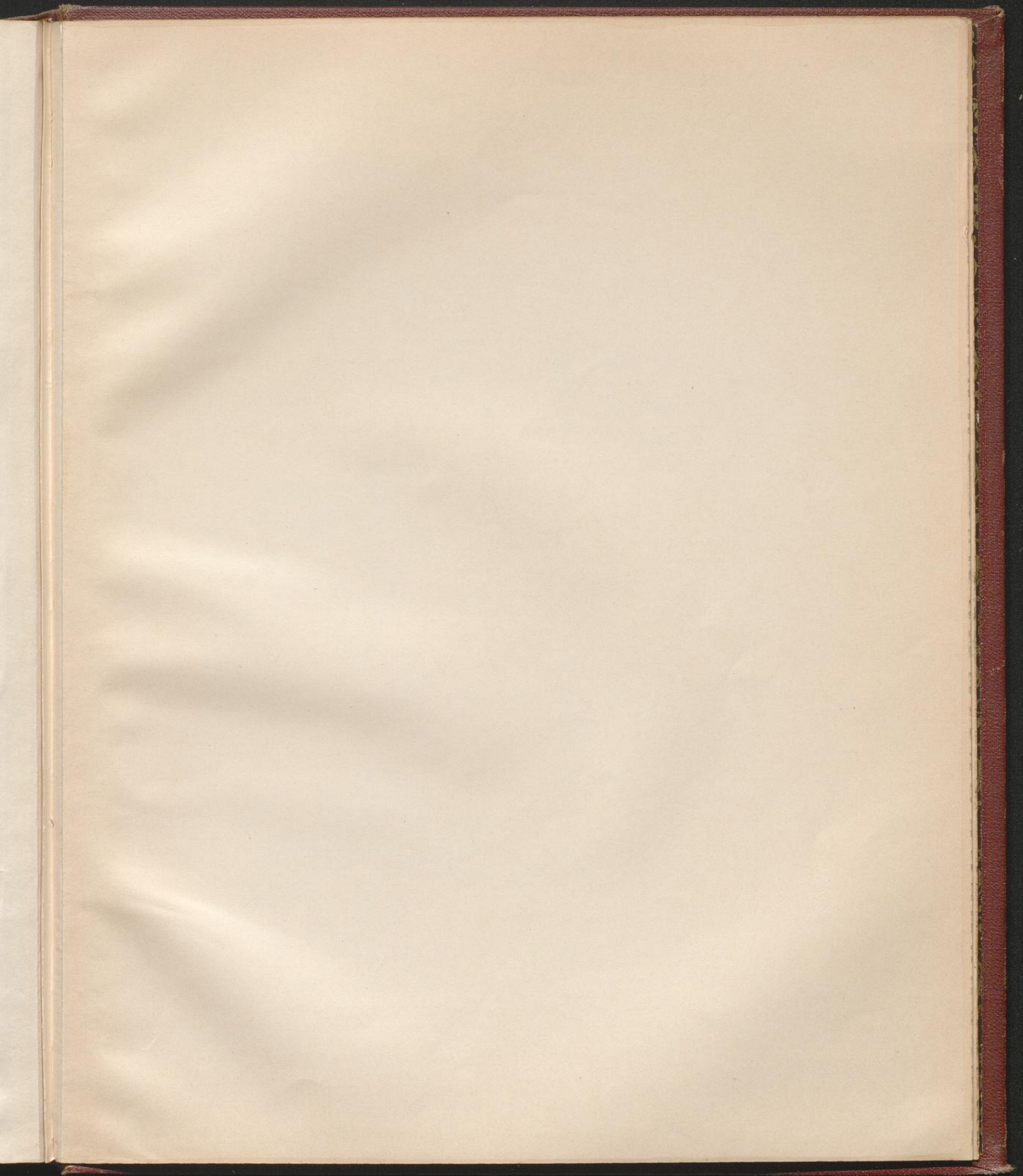
Heymann & Eisen (6 Aufl.)

J.M. Gebhardt's Verlag, Leipzig.

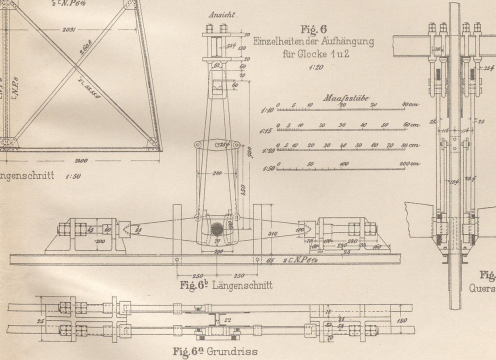
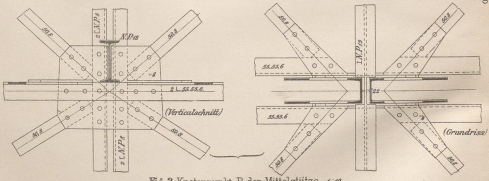
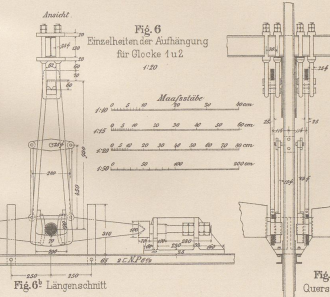
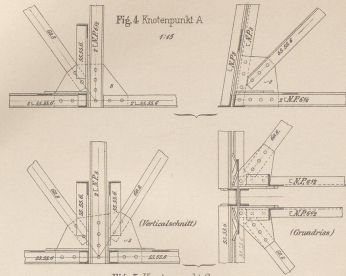
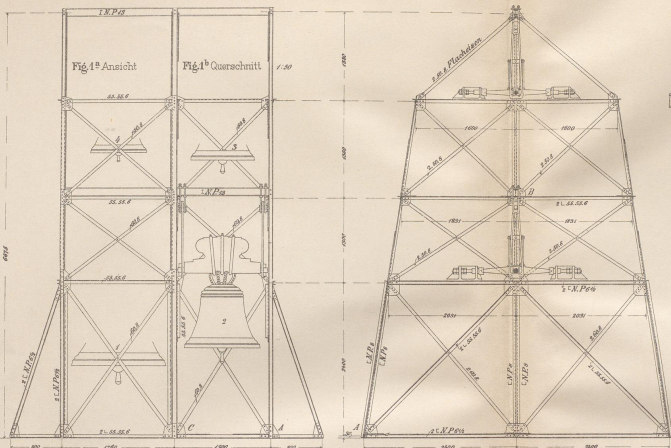






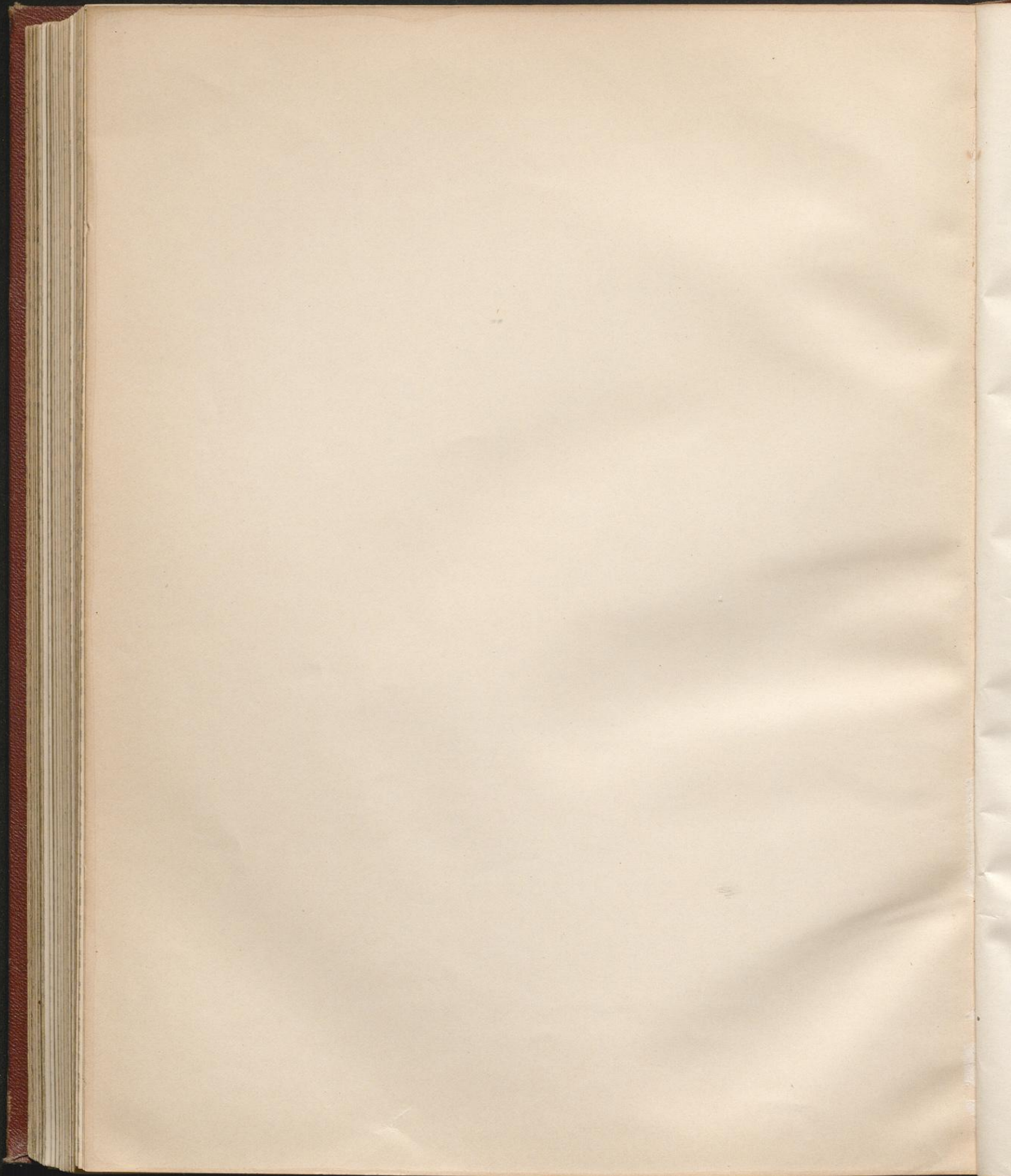


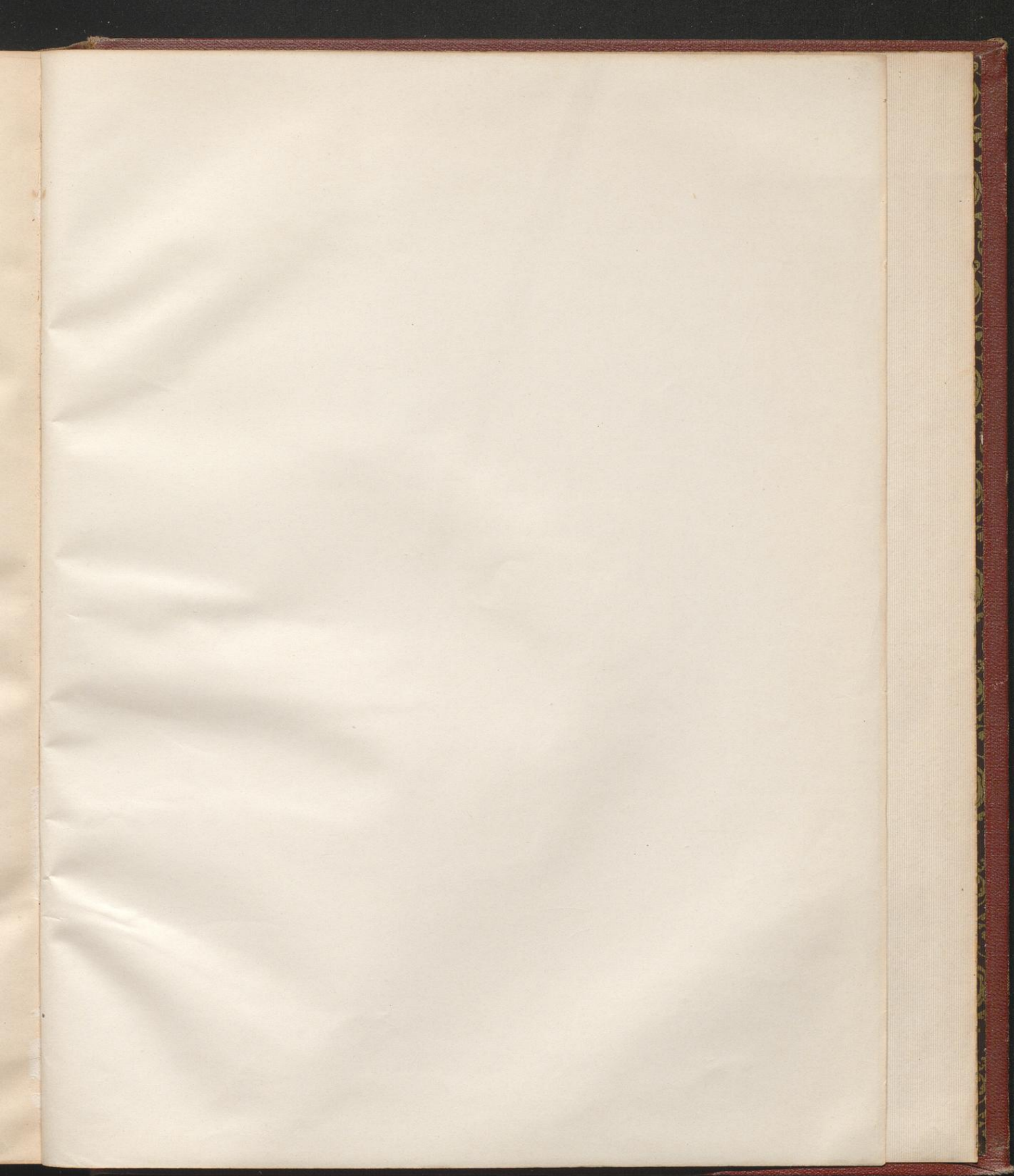
Glockenstuhl der Kirche zu Harsum.



entw. von Prof. E. Koch, Hannover.
Beymann & Eisen, 16. Aufl.

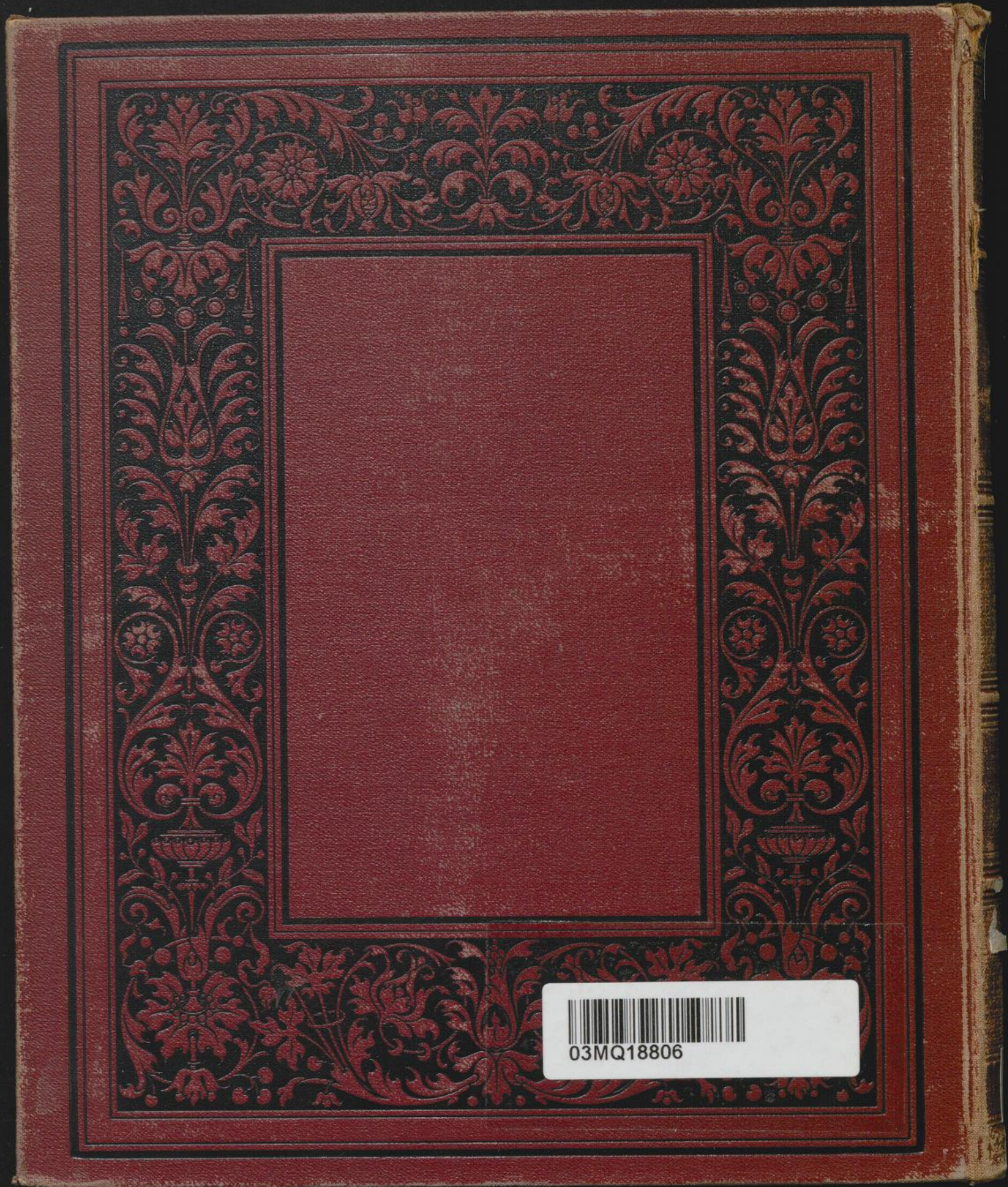
Chr. Hehl, Arch.
J.M. Gebhardt's Verlag, Leipzig











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03

TABELN
ZU
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KUNSTLEHRBÜCHER
LEHRE



III
EISEN



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