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RUBB

Collection of glass plate negatives illustrative of the
history of rubber and rubber industries.

Compiled by Elizabeth Parisi

Series title and reference	Item number	Date range	Description	Size (cm)
Glass Negatives - Box N1 to N36	RUBB/N1	c.1800	N1 Rubber (polymers) under microscope.	8.2x10.8
Glass Negatives - Box N1 to N36	RUBB/N2	c.1800	N2 Advertisement, September 29 1832. Museums, Register, Journal and Gazette. Drais improved velocipede (Fig.2)	8.2x8.2
Glass Negatives - Box N1 to N36	RUBB/N3	c.1800	N3 HANCOCK'S Steam carriage, Steam Coach Company. Walter Hancock, ERA Greenwich, London. Advertisement.	8.2x8.2
Glass Negatives - Box N1 to N36	RUBB/N4	c.1800	N4 Rubber polymer spectrum (G B Y B R). Mid -shot photograph.	8.2x10.8
Glass Negatives - Box N1 to N36	RUBB/N5	c.1800	N5 Rubber polymer spectrum (A B C). Mid -shot photograph	8.2x10.8
Glass Negatives - Box N1 to N36	RUBB/N6	c.1800	N7 Rubber polymer spectrum (B G Y R). Mid -shot photograph	8.2x10.8
Glass Negatives - Box N1 to N36	RUBB/N7	c.1800	N18 Tree cutting, people gathering. Mid -shot photograph	8.2x10.8
Glass Negatives - Box N1 to N36	RUBB/N8	c.1800	N8 Rubber machinery with operator in rubber making process. Mid -shot photograph (film neg.)	6.0x8.5
Glass Negatives - Box N1 to N36	RUBB/N9	c.1800	N9 GILTEX Bathing shoes made from rubber latex, 4 shoe boxes and 4 different shoe model. Advertisement (film neg.)	6.0x9.1
Glass Negatives - Box N1 to N36	RUBB/N10	c.1800	N10 Shoes, 3 different models and sizes. Close up photograph (film neg.)	6.1x8.9
Glass Negatives - Box N1 to N36	RUBB/N11	c.1800	N11 GILTEX Bathing shoes, 4 different models and sizes with shoes boxes. Mid -shot photograph (film neg.)	6.1x9.2

Glass Negatives - Box N1 to N36	RUBB/N19	c.1800	N19 Theatre/Museum costume display for children. Mid shot photograph	8.2x10.8
Glass Negatives - Box N1 to N36	RUBB/N20	c.1800	N20 BEARED BERTHA display poster with audience. Mid - shot photograph	8.2x10.8
Glass Negatives - Box N1 to N36	RUBB/N21	c.1800	N21 SINCLAIR EXHIBIT with people gathering. Mid -shot photograph	8.2x10.8
Glass Negatives - Box N1 to N36	RUBB/N22	c.1800	N22 SINCLAIR EXHIBIT entrance with giant dinosaur. Mid -shot photograph	8.2x10.8
Glass Negatives - Box N1 to N36	RUBB/N23	c.1800	N23 Dinosaur and palm trees, Sinclair Exhibit. Mid -shot photograph	8.2x10.8
Glass Negatives - Box N1 to N36	RUBB/N24	c.1800	N24 REX Display, Sinclair Exhibit. Mid -shot photograph	8.2x10.8
Glass Negatives - Box N1 to N36	RUBB/N25	c.1800	N25 Palms trees and people around, Sinclair Exhibit. Close up photograph	8.2x10.8
Glass Negatives - Box N1 to N36	RUBB/N26	c.1800	N26 Rusell Effect in smoked sheet, raw rubber (under microscope).	8.2x10.8
Glass Negatives - Box N1 to N36	RUBB/N27	c.1800	N27 Sir Clements R. Markham portrait. Mid -shot photograph	8.2x8.2
Glass Negatives - Box N1 to N36	RUBB/N28	c.1800	N28 Sample of rubber from the covers of two vats used for storing ethyl alcohol decanted with acetate acid in use for 7 years. Close up photograph	8.2x10.8
Glass Negatives - Box N1 to N36	RUBB/N29	c.1800	N29 Photomicrograph at 100x of solid alpha brass. This structure adheres best to rubber, the black inclusions are lead and one is marked A. (fig.1)	8.2x10.8

Glass Negatives - Box N1 to N36	RUBB/N30	c.1800	N30 This is a photomicrograph at 100x of solid brass containing both alpha and beta crystals. This structure gives poor adhesion to rubber. (The elongated crystals are beta brass). (fig.2)	8.2x10.8
Glass Negatives - Box N1 to N36	RUBB/N31	c.1800	N31 Fig.3 is a photomicrograph at 100x of a cross section of plated brass with rubber adhering. The black is rubber, the light is steel. (The brass marked C is not resolved).	8.2x10.8
Glass Negatives - Box N1 to N36	RUBB/N32	c.1800	N32 Fig.4 is a photomicrograph at 100x showing brass plated for two hours. The upper surface is nickel plate. The lower is steel. (Observe that the brass plate is much thinner in the recesses).	8.2x10.8
Glass Negatives - Box N1 to N36	RUBB/N33	c.1800	N33 Industrial plant, machinery. Mid -shot photograph	8.2x12
Glass Negatives - Box N1 to N36	RUBB/N34	c.1800	N34 Industrial plant, machines on floor with pipes. Mid shot photograph	8.2x12
Glass Negatives - Box N1 to N36	RUBB/N35	c.1930	N35 Table: production of crude rubber in 1940 in tons (Malaya, Ceylon, Netherlands, Indo-China, Borneo and rest of the world figures).	8.2x10.8
Glass Negatives - Box N1 to N36	RUBB/N36	c.1800	N36 Map: plantation rubber production countries. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 2 to 210	RUBB/2	c.1800	2 Market Place, Marlborough, about 1800. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/3	c.1800	3 St Peter's Church, Marlborough (exterior), about 1800. Mid -shot photograph	8.2x8.2

Glass Negatives - Box 2 to 210	RUBB/4	c.1800	4 St Peter's Church, Marlborough (interior), about 1800. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/5	c.1800	5 Old Grammar School, Marlborough, Wiltshire. About 1800. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/6	c.1800	6 (2 negatives) Marriage Register: James Hancock and Betty Coleman, 1778.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/8	c.1800	8 (2 negatives) Baptism Register of Thomas Hancock. 6th June 1786.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/9	c.1800	9 Portrait Betty Hancock. From painting by Charles Hancock. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/10	c.1800	10 Proclamation in Marlborough paper November 3, 1772. Notice concerning persons disturbing a congregation of dissenters in Marlborough.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/11	c.1800	11 Authority for establishment of Dissenting Chapel by Thomas Hancock, 1774. Signed by J.M.Ewen.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/12	c.1800	12 Borough and Inn of Marlborough. Authority for establishment of Dissenting Chapel by Thomas Hancock, 1774 signed by Charles Bill.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/13	c.1800	13 Bond for £20 entered into by Thomas Hancock's assailants in 1775.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/14	c.1800	14 (film negative) Inlaid mahogany tray made by James Hancock. Close up photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/15	c.1800	15 Pilentum or Lady's accelerator made by Hancock & Co., 1819. This vehicle is peculiarly adapted for the use of Ladies. It is impelled by the slightest touch of either the hands or	8.2x8.2

			feet.	
Glass Negatives - Box 2 to 210	RUBB/16	c.1800	16 Portrait Joseph Priestley. Portrait in the National Portrait Gallery. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/20	c.1800	20 Map of Clerkenwell in 1799. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/21	c.1800	21 Portrait Charles Macintosh F.R.S., sitting by table. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/22	c.1800	22 Portrait Charles Macintosh F.R.S. Close up photograph	8.2x10.8
Glass Negatives - Box 2 to 210	RUBB/23	c.1800	23 Title page of "Memoir of Charles Macintosh", 1847. Biographical memoir, Glasgow.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/24	c.1800	24 Letter from R.W.Barton an original partner in Chas.Macintosh & Co.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/29	c.1800	29 Letter from M.Faraday, F.R.S.; to Thomas Hancock (January, 1857).	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/30	c.1800	30 Front page of John Bull Vol XII No.616, Sunday September 30, 1832. An announcement appears to the effect that John Hancock the original manufacturer of domestic and medical goods of caotchoucm has opened a warehouse at 11 Agar St, Strand.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/32	c.1800	32 Letter in French from Charles Guibal to Thomas Hancock. Paris, 1857.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/33	c.1800	33 In French: Rattier & Cie aux Terrace (Emploi du caoutchouc de la guta percha). Letter to Thomas Hancock. La France, 1852	8.2x8.2

Glass Negatives - Box 2 to 210	RUBB/34	c.1800	34 Letter from E. Woodcock to Thomas Hancock, 1857.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/35	c.1800	35 Advertisement. Chas.Macintosh & Co. Patentees of Indian rubber.Depot at 50 Charing Cross (also at 46 Cheapside). About 1840. The company is described as manufacturing waterproof clothes of double texture, air cushions, pillows and at the Manufactory, Manchester.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/37	c.1800	37 (two negatives) Fire Insurance Policy in Hancock's works. 1834.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/38	c.1800	38 The first Steam Engine used in rubber manufacture. A grasshopper engine built at Easton & Amos. Erected in the Hancock's works, 1834, at 266 Goswell Road, London, EC1. Dismantled in 1922 after running over 80 years. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/39	c.1800	39 (two negatives) Documents. Hancock's valuation of premises and plant at Goswell Road. 1836.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/40	c.1800	40 Trade Mark of Chas. Macintosh & Co. India Rubber Manufacturers established 1824 (Hand-Cock). Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/41	c.1800	41 Portrait Walter Hancock, after painting by Charles Hancock. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/42	c.1800	42 Title page of Walter Hancock's "Narrative of twelve years of experiments (1824-1836) demonstrative of the practicability of steam carriages in common roads". 1838. Engravings and Descriptions, London. Published by John Weale.	8.2x8.2

Glass Negatives - Box 2 to 210	RUBB/43	c.1800	43 Plate 3 Fig. 7 Walter Hancock's first experimental steam carriage. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/44	c.1800	44 Plate 4 Fig. 8. Walter Hancock's "Infant" steam carriage. Stratford-London. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/45	c.1800	45 Fig. 9 Walter Hancock's "Infant" steam carriage remodelled. Paddington-Regents Park-City. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/46	c.1800	46 Fig. 9 Walter Hancock's "Infant" steam carriage remodelled showing mechanical details. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/48	c.1800	48 Fig.11 Walter Hancock's "Entreprise" steam carriage. Paddington-City. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/49	c.1800	49 Fig.12 Walter Hancock's "Autopsy" steam carriage. Stratford-City. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/50	c.1800	50 Fig.13 Walter Hancock's steam drag. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/51	c.1800	51 Fig. 10 Walter Hancock's "Era" or "Erin" steam coach carriage. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/52	c.1800	52 "The Marlborough" steam carriage, by Walter Hancock. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/54	c.1800	54 The oldest and early spreading machine. (C.B.Heinke & Co.). 1852. Advertisement.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/56	c.1800	56 (2 negatives) Portrait Nathaniel Hayward. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/57	c.1800	57 Letter from Thomas Hancock to Nathaniel Hayward, 1857.	8.2x8.2

Glass Negatives - Box 2 to 210	RUBB/58	c.1800	58 Portrait of Stephen Moulton. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/59	c.1800	59 Portrait of William Brockendon (head only), Member of the Academy. Mid -shot photograph	8.7x13.9
Glass Negatives - Box 2 to 210	RUBB/60	c.1800	60 Portrait of William Brockendon, full length, holding manuscript. Mid -shot photograph	8.7x13.9
Glass Negatives - Box 2 to 210	RUBB/64	c.1800	64 Portrait of Thomas Graham F.R.S. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/65	c.1800	65 Letter from Thomas Graham F.R.S. to Thomas Hancock.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/66	c.1800	66 Portrait of Arthur Aikin. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/67	c.1800	67 Letter from Arthur Aikin to Thomas Hancock. 22 July 1852.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/68	c.1800	68 Partnership agreement, Chas. Macintosh & Co. 1st November 1845.Signed in presence of William Brockendon.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/70	c.1800	70 Portrait of Walter Hancock, Jr. 1903 by Maull & Fox of 187A Picadilly, London. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/71	c.1800	71 Rubber medallion portrait of Thomas Hancock. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/72	c.1800	72 Early moulding & vulcanizing, by Thomas Hancock. Pastoral scene moulded in rubber about 1852.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/74	c.1800	74 Letter from Alexander Parkes to Thomas Hancock.	8.2x8.2

Glass Negatives - Box 2 to 210	RUBB/75	c.1800	75 Portrait of W.A.Buckingham. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/76	c.1800	76 Letter from W.A.Buckingham to Thomas Hancock in Stoke Newington, 1857.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/77	c.1800	77 Notice of formation of Goodyear Shoe Association. Circular of 1858.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/79	c.1800	79 Portrait of James Lyne Hancock. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/93	c.1800	93 Letter from Henry Karslake to Thomas Hancock.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/95	c.1800	95 (2 negatives) Portrait of Sir W.J.Hooker F.R.S. Mid - shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/96	c.1800	96 Letter from Sir W.J. Hooker F.R.S. to Thomas Hancock, February 1857.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/97	c.1800	97 (2 negatives) Portrait of Sir Joseph D.Hooker, 1855 from a drawing by Richmond. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/98	c.1800	98 Title page of Thomas Hancock's "Personal Narrative" of the origins and progress of the cautchouc or India-rubber manufacture in England. With engravings to which is added some account of the plants from which caoutchouc is obtained. (1857)	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/99	c.1800	99 Iluminated address from employees of Chas.Macintosh & Co., 1858 to The Hancock Esq. Signed: Cambridge Street India Rubber Works.	8.2x8.2
Glass Negatives - Box 2	RUBB/100	c.1800	100 Thomas Hancock's acknowledgment of employees' address (1858). (copy of the	8.2x8.2

to 210			letter to W. Woodcock).	
Glass Negatives - Box 2 to 210	RUBB/101	c.1800	101 Patents taken out by members of the Hancock Family: James, Thomas, John, William, Walter and Charles Hancock. Patents specification numbers and dates are listed.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/104	c.1800	104 Portrait of Thomas Hancock. (This portrait is of a later date than the one in RUBB/1). Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/105	c.1800	105 Residence of John Hancock."Varfell", Ludgvan, Cornwall. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/106	c.1800	106 Portrait of H.H. Birley, original partner in Chas. Macintosh & Co. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 2 to 210	RUBB/107	c.1800	107 Trade Mark of Chas. Macintosh & Co., Ltd. India Rubber Manufacturer. Established 1824.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/108	c.1800	108 (4 negatives) Fig.11 Goldsworthy Guerney's steam Coach. 1826-1828	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/109	c.1800	109 (2 negatives) Fig. 9 and 10 Wheel and driver. Wheel used in Walter Hancock's steam coaches. The essential features are metallic naves.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/110	c.1800	110 Letter from J.Baxendale to Thomas Hancock.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/111	c.1800	111 Portrait of W.T.Brande, F.R.S. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/112	c.1800	112 Letter from J.H. Gladstone, F.R.S. to Thomas Hancock.	8.2x8.2

Glass Negatives - Box 2 to 210	RUBB/115	c.1900	115 Letter dated 11 June 1920 from H.M.King George V re Hancock's "Personal Narrative" to Sir C. Inigo Thomas G.C.B. Cahirman of Messr. James Lyne Hancock Limited.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/116	c.1800	116 Walter Hancock. Portrait. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/117	c.1800	117 Original Blanchard Lathe, 1822. (Museum, US Armory, Springfield. Mass).	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/119	c.1800	119 (2 negatives) Charles Babbage, F.R.S. portrait. Mid- shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/120	c.1800	120 Fig.1 Symington & Miller first steam boat, 1788 in the Museum, Register, Journal and Gazette NO. 488. December 15, 1832.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/121	c.1800	121 Symington's first model steam carriage, 1784.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/122	c.1800	122 Braithwaite's first steam fire engine "Comet", 1832. Constructed for the Prussian government.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/123	c.1800	123 (2 negatives) Figs. 26 and 27 Drawing showing details of Thomson's road steamer "Ravee".	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/124	c.1800	124 Portrait of Edwin M. Chafee. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/129	c.1800	129 (2 negatives) Portrait of John Hall Gladstone, F.R.S. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/130	c.1800	130 Portrait of R.W. Thomson. Mid -shot photograph	8.2x8.2
Glass Negatives	RUBB/131	c.1800	131 Portrait of R.W. Thomson. Close up photograph	8.2x10.8

- Box 2 to 210				
Glass Negatives - Box 2 to 210	RUBB/134	c.1800	134 (2 negatives) Portrait of Sir Henry Wickham. Mid - shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/135	c.1800	135 Portrait of J.B.Dunlop. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/136	c.1800	136 Portrait of Charles Kingston Welch. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/137	c.1800	137 Portrait of Harvey Du Cros, J.P. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/138	c.1800	138 Portrait of Richard Booth, Director of the Pioneer Company. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/139	c.1800	139 Portrait of Frederick W. Woods, director of the Pioneer Company. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/140	c.1800	140 Portrait of Richard J. Mecredy, Director of the Pioneer Company. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/142	c.1800	142 House in Stonehaven in which R.W.Thomson was born. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/143	c.1800	143 Portrait of Robert W. Thomson. (full body). Mid - shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/144	c.1800	144 Portrait of R.W.Edlin and his wife. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/145	c.1800	145 Portrait of Findlay Sinclair. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/158	c.1800	158 Photomicrograph showing compounding ingredient imperfectly dispersed in rubber.	8.2x10.8

Glass Negatives - Box 2 to 210	RUBB/163	c.1800	163 Portrait of W.E. Bartlett. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/164	c.1800	164 Portrait of W.E. Bartlett riding a bike. Photograph by W.T. Davidson Moffat N.B. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/165	c.1800	165 (with duplicate) Portrait of C.O. Weber. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/166	c.1800	166 (2 negatives) Portrait J.P.Joule, F.R.S. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/172	c.1800	172 (with 6 film photographs) Portrait of Charles de la Condamine 1701-1775, plate.	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/174	c.1800	174 Portrait of Stephen Moulton. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/178	c.1800	178 (3 negatives and 5 film photographs) Portrait of Sr Clements Markham. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/180	c.1800	180 Portrait of Charles Goodyear. Painted in England by A.H. Ritchie. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/182	c.1800	182 (2 negatives) Portrait of William Murdoch, inventor of the gas lighting. Mid - shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/183	c.1800	183 Portrait of Antoine du Foucroiy, plate (in German).	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/184	c.1800	184 Portrait of Eugene Obach. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/186	c.1800	186 Portrait of Christopher Columbus. Mid -shot photograph	8.2x8.2

Glass Negatives - Box 2 to 210	RUBB/187	c.1800	187 Original Colza Oil Lamp used in Hancock's Works. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/188	c.1800	188 Portrait of William Roxburgh, Superintendent of the Botanic Gardens Calcutta from 1793 to 1813 (Survey Of India Offices, Calcutta, February 1895). From an engraving by C. Warren	8.2x10.8
Glass Negatives - Box 2 to 210	RUBB/189	c.1800	189 The jungle. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/190	c.1800	190 Felling in progress. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/191	c.1800	191 Clearing jungle. Mid - shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/192	c.1800	192 Burning off felled jungle. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/193	c.1800	193 Clearing timber after burning. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/194	c.1800	194 Draining in the jungle. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/195	c.1800	195 Holing, jungle in the background. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/196	c.1800	196 Nurseries, seedlings six weeks old. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/197	c.1800	197 Nurseries, seedlings fourteen months old, out for planting out. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2	RUBB/198	c.1800	198 Stumps planted out fifteen months old showing new shoots. Mid- shot	8.2x8.2

to 210			photograph	
Glass Negatives - Box 2 to 210	RUBB/199	c.1800	199 Planting. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/200	c.1800	200 Weeding. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/201	c.1800	201 Terracing (blind drains). Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/202	c.1800	202 Terracing showing unterraced hill in background. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/203	c.1800	203 Upkeep, showing deposits from catchpits being spread round trees. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/204	c.1800	204 Trees before manuring and terracing standing in grass. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/205	c.1800	205 The same trees eighteen months later (trees shown in slide 204). Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/206	c.1800	206 Two year old trees, soil aerated after planting nitrogeneus plants. Mid - shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/207	c.1800	207 Five year old trees. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/208	c.1800	208 Special seed bearing trees thirteen years old. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/209	c.1800	209 (2 negatives) Eighteen year old tree with a girth of 110 inches. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 2 to 210	RUBB/210	c.1800	210 Diseased tree successfully treated. Mid - shot photograph	8.2x8.2

Glass Negatives - Box 211 to 376	RUBB/211	c.1800	211 Peculiar bark formation on poor yielding fifteen year old tree. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/212	c.1800	212 Hospital showing native wards. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/213	c.1800	213 (2 negatives) Hospital dining room, showing attendants. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/214	c.1800	214 Hospital interior showing women's ward. Mid - shot photograph.	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/215	c.1800	215 Tree showing tapping system. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/216	c.1800	216 Tapping in progress. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/217	c.1800	217 Tree after being tapped. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/219	c.1800	219 Transport of latex to factory by coolies. Mid - shot photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/220	c.1800	220 Transport of latex by lorry. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 211 to 376	RUBB/221	c.1800	221 Rubber estate factory. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 211 to 376	RUBB/222	c.1800	222 Receiving latex at the factory. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 211 to 376	RUBB/224	c.1800	224 Rolling rubber after coagulation. Mid -shot photograph	8.2x10.8

Glass Negatives - Box 211 to 376	RUBB/225	c.1800	225 (2 negatives) Coagulum being converted into crepe. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/226	c.1800	226 Women workers washing, milling and trimming crepe. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 211 to 376	RUBB/227	c.1800	227 Workers in coagulating tanks. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 211 to 376	RUBB/228	c.1800	228 Drying crepe in vaccuum dryers. Close up photograph	8.2x10.8
Glass Negatives - Box 211 to 376	RUBB/229	c.1800	229 (2 negatives) Worker with machinery for washing scrap rubber. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 211 to 376	RUBB/230	c.1800	230 (2 negatives) Sheets hanging on racks in smoke house. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 211 to 376	RUBB/231	c.1800	231 Exterior of crepe drying rooms. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 211 to 376	RUBB/232	c.1800	232 Interior of crepe drying rooms. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/233	c.1800	233 (2 negatives) Despatching rubber from factory by bullock carts. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/234	c.1800	234 Transport of rubber to railway by motor lorry. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 211 to 376	RUBB/235	c.1800	235 Unloading rubber from Wallams for storage before shipment. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/236	c.1800	236 Loading rubber on steamer for direct shipment. Mid shot photograph	8.2x10.8

Glass Negatives - Box 211 to 376	RUBB/237	c.1800	237 (2 negatives) Tire- building machine. Flat drum type. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/238	c.1800	238 Tire tube assembling shop. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/239	c.1800	239 Battery of tube vulcanisers. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/240	c.1800	240 Battery of washing machines used for vulcanising. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 211 to 376	RUBB/241	c.1800	241 (3 negatives) Large roll mill with man operating the machinery. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/243	c.1800	243 Three-bowl calendar in operation. Front side. Mid - shot photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/244	c.1800	244 (2 negatives) Beaded- edge tire being removed from mould. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/245	c.1800	245 Carrying-frame for vulcanising cycle inner tubes. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 211 to 376	RUBB/246	c.1800	246 (3 negatives) Removing pneumatic tires moulds from autoclave. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/247	c.1800	247 (2 negatives) Pneumatic tire moulding shop with workmen. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/248	c.1800	248 (2 negatives) Hydraulic guillotine cutting block of raw rubber with personnel present. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/249	c.1800	249 Fort Dunlop railway sliding - unloading raw rubber (showing packages boxes). Close up photograph	8.2x10.8

Glass Negatives - Box 211 to 376	RUBB/250	c.1800	250 Dunlop Cord Ballon tire. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/251	c.1800	251 View of Fort Dunlop. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/258	c.1900	258 Baker-Perkins internal mixer. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/260	c.1900	260 Vulcanisation ovens for curing footwear by dry heat (man operated). Mid -shot photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/261	c.1900	261 Plantation washing mills driven by gas engine. Mid - shot photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/262	c.1900	262 (2 negatives) Hunter drying kiln - exterior. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/263	c.1900	263 Sectional diagram of Hunter drying kiln.	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/266	c.1900	266 (2 negatives) Large mixing mill at maker's work. (Photo by Fry.Ltd.. Malden Crescent, London NW1) Mid - shot photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/267	c.1900	267 Special medium strength mill. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/268	c.1900	268 (two negatives) Single roll masticator (interior). Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/269	c.1900	269 Three-bowl calendars, 87" x 30". Close up photograph.	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/270	c.1900	270 Small four-bowl calendar. Francis Shaw & Co. Ltd. Close up photograph	8.2x8.2

Glass Negatives - Box 211 to 376	RUBB/271	c.1900	271 Belt driven embossing calendar. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/272	c.1900	272 Three-mould hydraulic platen press. Francis Shaw & Co. Ltd. of Bradford, Manchester. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/273	c.1900	273 Ten ram hydraulic belting press. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/274	c.1900	274 Autoclave vulcaniser for tractor tires. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/275	c.1900	275 Cycle tire vulcaniser. Close up photograph	8.2x10.8
Glass Negatives - Box 211 to 376	RUBB/276	c.1900	276 Diagram of TAG controller connections for autoclave vulcaniser. Francis Shaw & Co.Ltd., Engineers, Bradford. Manchester. Automatic control of temperature, exhaust, time and blow off.	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/277	c.1900	277 Diagram of TAG controller. Drawing No.11971. Francis Shaw & Co. Ltd. Engineers, Bradford. Manchester.	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/278	c.1900	278 Diagram of lead press with details.	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/279	c.1900	279 Bolton vertical bias fabric cutter. Francis Shaw & Co.Ltd., Manchester. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/280	c.1900	280 Thropp tire-building machine for high pressure tires with details. Thorpp Patent No.29234. Francis Shaw & Co.Ltd. Bradford, Manchester. Close up photograph	8.2x8.2

Glass Negatives - Box 211 to 376	RUBB/281	c.1900	281 Double watch-case vulcaniser. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/282	c.1900	282 Healey-Shaw cycle-tire- building machine. Francis Shaw & Co. Ltd. Manchester. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/283	c.1900	283 Sykes double helical gear cutter. Francis Shaw & Co. Ltd. Manchester. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/284	c.1900	284 H.P.M. Hydraulic Press. Francis Shaw & Co. Ltd. Manchester. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/285	c.1900	285 Graph. Stress-strain curves and hysteresis loops for 5 types of vulcanised rubber.	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/286	c.1900	286 David Bridge & Co. Ltd. Castleton, Licencees for Sole Mixers. Bridge-Banbury Internal Mixer No.3. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/287	c.1900	287 Bridge-Banbury Internal Mixer No.9. Bridge-Banbury Patents. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/288	c.1900	288 Bridge-Banbury Internal Mixer, sectional diagram with details.	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/289	c.1900	289 Drawing of spreading machine. Bridge's Improved Spreading Machine for Garment Cloth, Card Clothing, Waterproofing, etc. Photograph of machine fitted with Mild Steel Steam Chests. Agents for the continent of Europe, Baerlein & Sons. Manchester.	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/290	c.1900	290 Spreading machines in waterproof garment factory. Mid-shot photograph	8.2x10.8
Glass Negatives - Box 211	RUBB/291	c.1900	291 Diagram of three methods of testing permeability of rubber or rubberised fabric	8.2x8.2

to 376			to gases.	
Glass Negatives - Box 211 to 376	RUBB/292	c.1900	292 Apparatus in the laboratories of the North British Rubber Co. Ltd. for testing balloon fabric, 1916-18. Mid shot photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/293	c.1900	293 Apparatus in the laboratories of the North British Rubber Co. Ltd. For testing balloon fabric, 1916-18. Working bench. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/294	c.1900	294 Personnel of the North British Rubber Co. Ltd., balloon fabric testing laboratory, 1918. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/295	c.1900	295 Graph on the effects of various ferrocyanides on the plasticity of unvulcanised stocks. Data from J.R.Scott: note on the behaviour of Prussian blue and other ferrocyanides in rubber. I.R.I. Transactions 1929, 4, 374. Twelve curves are given, plotting log thickness against log rate of change of thickness, using the Williams plastimeter. (Curve 1: 95:5 rubber-sulphur stock; curves 2-6 same; containing 12 parts of 2 Prussian blue. Curve 3: Turnbull's blue; 4: lead ferrocyanide, curve 5: zinc ferrocyanide; 6: gas black. Curves 7 to 12 as curves 1 to 6, except that sulphur is absent.	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/296	c.1900	296 Tabulation. Effects of various ferrocyanides on the plasticity of unvulcanised stocks. Consistency and friction figures are given for the same stock described in negative 295. (see negative 295)	8.2x8.2

Glass Negatives - Box 211 to 376	RUBB/297	c.1900	297 Graph of the increase in weight of unvulcanised rubber containing various ferrocyanides. (See negative 295). Increase in weight is plotted against time in days for stocks Nrs. 1, 2, 3, 7, 8 and 9 (described in negative 295).	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/298	c.1900	298 (2 negatives) Tables 1 and 2. Tabulation: tensile properties of vulcanised rubbers containing various ferrocyanides. (See negative 295). States time of vulcanisation, tensile strength and % elongation at 0.5 kg/mm ² of vulcanised stocks Nrs. 1, 2, 3, 4, 5 and 6 (described in negative 295). Also curve 13 is for a rubber containing zinc oxide, titanium white and diphenylguanidine. Curves 14 and 15 are for the same rubber containing Prussian blue and Turnbull's blue respectively.	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/299	c.1900	299 Graph of tensile strength changes during ageing at 70 °C of vulcanised rubbers containing various ferrocyanides. (I.R.I. Transactions, 1929, 4, 390. Fig. 5. The curves given are for stocks 1, 2, 3, 4 and 5 (described in negative 295). Curves 13, 14 and 15 are described in negative 298.	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/300	c.1900	300 Graph of tensile strength changes during natural ageing of vulcanised rubbers containing various ferrocyanides. (See note in negative 295). Ageing curves are given for rubbers Nos. 1, 2, 3, 4 and 5 described in negative 295.	8.2x8.2

Glass Negatives - Box 211 to 376	RUBB/301	c.1900	301 Graph of changes in weight during natural ageing of vulcanised rubbers containing various ferrocyanides. (See note in negative 295). Curves are given for rubbers Nos.1, 2 and 3 described in negative 295 and for Nos. 13, 14, and 15 in negative 298.	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/302	c.1900	302 Photomicrograph of Hevea latex, showing pear-shaped rubber globule. (Forms front species to "Latex". 1928 by H.P.Stevens)	8.2x10.8
Glass Negatives - Box 211 to 376	RUBB/304	c.1900	304 Shaw's Mixing mill, 84". Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/305	c.1900	305 Refining mill. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/306	c.1900	306 Four-bowl calendar, 92" x 32". Mid-shot photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/307	c.1900	307 Francis Shaw & Co. Ltd. (Bradford, Manchester) embossing calendar. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/308	c.1900	308 Semi-automatic single daylight platen press. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/309	c.1900	309 Daylight 14-platen hydraulic press with pump, accumulator and intensifier. Francis Shaw & Co. Ltd. Bradford, Manchester. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/311	c.1900	311 Graph of uniform compression of sponge rubber sheet (depression in mm against load per sq.cm in kilograms). Compressibility of eight samples of sponge rubber including one sample of cellular rubber. (I.R.I. Trans., 1929, 4, 537. Fig.1)	8.2x8.2

Glass Negatives - Box 211 to 376	RUBB/312	c.1900	312 Graph of compressibility (sq.cm/kg) against mean cell diameter (mm). Variation of compressibility of sponge rubber with size of cell. (I.R.I. Trans., 1929, <u>4</u> , 541, Fig.2)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/313	c.1900	313 Section of light sponge rubber. (I.R.I. Trans., 1929, <u>4</u> , facing p.540, Fig.A3)	8.2x10.8
Glass Negatives - Box 211 to 376	RUBB/314	c.1900	314 Section of sponge rubber, medium cells. (I.R.I. Trans., 1929, <u>4</u> , facing p.540, Fig. A-1)	8.2x10.8
Glass Negatives - Box 211 to 376	RUBB/315	c.1900	315 Section of sponge rubber, large cells. (I.R.I. Trans., 1929, <u>4</u> , facing p.54, Fig. A-5)	8.2x10.8
Glass Negatives - Box 211 to 376	RUBB/316	c.1900	316 (2 negatives) Two sections of heavy sponge rubber and one of cellular rubber. (I.R.I. Trans., 1929, <u>4</u> , facing p.541, Fig.B-1, B-2, C-1)	8.2x10.8
Glass Negatives - Box 211 to 376	RUBB/317	c.1900	317 Graph of resilient energy against vols.whiting per 100 vols.rubber. Effect on resilient energy of vulcanised rubber of increasing content of whiting. (I.R.I. Trans., 1926, <u>1</u> , 361, Fig.1. Two curves are given, the lower referring to varying the whiting from 0-50 vols. per 100 vols. of rubber in a 95:5 rubber-sulphur mix. And the upper curve to a similar range of whiting contents in a rubber-sulphur-litharge mix).	8.2x8.2

<p>Glass Negatives - Box 211 to 376</p>	<p>RUBB/318</p>	<p>c.1900</p>	<p>318 Graph of elongation, rigidity, permanent set, resilience, hardness and resilient energy. Mechanical properties of vulcanised rubbers containing various ratios of carbon black to zinc oxide, and carbon black to clay. (I.R.I. Trans., 1926, <u>1</u>, 363, Fig.2. Curves are given showing effect of varying the ratios carbon black: zinc oxide and carbon black: clay on % elongation at standard load, rigidity, permanent set, hardness, resilience, "slope", resilient energy at fixed load, and stretch-illustrating departure from the mixture law.)</p>	<p>8.2x8.2</p>
<p>Glass Negatives - Box 211 to 376</p>	<p>RUBB/319</p>	<p>c.1900</p>	<p>319 Graph of scleroscope rebound against temperature in Fahrenheit (F). Effect of temperature on scleroscope rebound test of vulcanised rubber. (I.R.I. Trans., 1927, <u>3</u>, 220, Fig.1. Three curves are given, referring to a zinc oxide rubber, a carbon black rubber, and the 95:5 rubber-sulphur parent stock)</p>	<p>8.2x8.2</p>
<p>Glass Negatives - Box 211 to 376</p>	<p>RUBB/320</p>	<p>c.1900</p>	<p>320 Graph of scleroscope rebound against minutes cure. Effect of time of vulcanisation on the scleroscope rebound for various vulcanised rubbers. (I.R.I Trans., 1927, <u>3</u>, 221, Fig.2. Four curves are given, relating to rubbers containing (a) carbon black, (b) magnesium carbonate, (c) zinc oxide, and (d) for the 95:5 rubber- sulphur parent stock)</p>	<p>8.2x8.2</p>

Glass Negatives - Box 211 to 376	RUBB/321	c.1900	321 Graph of scleroscope rebound against compounding ingredient % by weight. Effect on scleroscope rebound of increasing the content of compounding ingredient in various vulcanised rubbers. (I.R.I. Trans., 1927, <u>3</u> , 222, Fig. 3. Five curves are given for rubbers containing increasing amounts of (a) litharge, (b) zinc oxide, c) whiting, (d) gas black, and (e) magnesium carbonate.)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/322	c.1900	322 Graph of seconds per ten swings (durometer reading) against barium sulphate, weight%. Effect of increasing content of barytes on the hardness of vulcanised rubber, as measured by the Durometer and the Herbert Pendulum. (I.R.I. Trans., 1927, <u>3</u> , Fig.4; p.224)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/323	c.1900	323 Graph of plastometer against durometer, showing lines of regression. Lines of regression, correlation of Durometer and Pusey-Jones plastometer methods of measuring hardness of vulcanised rubber. (I.R.I. Trans., 1927, <u>3</u> , 225, Fig.5)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/324	c.1900	324 Graph of plastometer mm/100 against scleroscope rebound. Correlation of Pusey-Jones plastometer and scleroscope rebound tests for measuring hardness of vulcanised rubber. (I.R.I. Trans., 1927, <u>3</u> , 227, Fig.6. Curves are given for rubbers compounded with (a) whiting, (b) magnesium carbonate, (c) litharge, (d) lampblack, (e) gas black.)	8.2x8.2

Glass Negatives - Box 211 to 376	RUBB/325	c.1900	325 Tabulation Distribution of scleroscope and Pusey-Jones plastometer results in testing hardness of vulcanised rubbers	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/326	c.1900	326 Graph of pendulum (secs/10 swings) against mms.thickness. Effect of thickness of sample on hardness testing of vulcanised rubber by the scleroscope, Herbert pendulum and the Durometer. (I.R.I. Trans., 1927, <u>3</u> , 229, Fig.7)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/327	c.1900	327 Graph. Effect of size of sample hardness testing of vulcanised rubber by the Durometer, scleroscope, and Pusey-Jones plastometer (I.R.I. Trans., 1927, <u>3</u> , 231, Fig.8)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/328	c.1900	328 Graph of swelling against time (time-swelling curve). Typical time-swelling curve for vulcanised rubber in contact with solvent. (Very similar to I.R.I. Trans., 1929, <u>5</u> , 97, Fig.1)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/329	c.1900	329 Tabulation of rubber sulphur mixing (95:5) swollen at 25oC. Swelling maximum, and increment (per 100 hours) for vulcanised 95:5 rubber-sulphur mix in various solvents. (data from: J. R. Scott, Swelling of vulcanised rubber in liquids, I.R.I. Trans., 1929, <u>5</u> , 95. The solvents mentioned are benzene, decahydronaphthalene (dekalin), petroleum ether, paraffin oil, chlorobenzene, nitrobenzene, carbon tetrachloride, carbon disulphide, chloride, aniline, methyl-anilide, cyclohexanol, cyclohexanone, cyclohexane, cyclohexyl acetate, acetone,	8.2x8.2

			ethyl alcohol, ethyl acetate and amyl acetate.)	
Glass Negatives - Box 211 to 376	RUBB/330	c.1900	330 Graph of swelling time against viscosity (centipoises). Relationship between the viscosity of a solvent and its swelling time for vulcanised rubber. (I.R.I. Trans., 1929, <u>5</u> , 102, Fig. 2)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/331	c.1900	331 Tabulation. Relative swelling increment of a vulcanised 95:5 rubber-sulphur mix in benzene and in benzene plus added substances. (See note under negative 329. Substances added include chloracetic acid, trichloroacetic acid, aniline, pyridine, copper oleate, magnesium oleate, benzoyl peroxide, benzoyl, "Age Rite", "VGB", peroxide, turpentine, sulphur diphenylguanidine, p-nitrosodimethylaniline, quinol, tetramethylthiuram disulphide, rubber resin (crepe) and water.)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/332	c.1900	332 Graph. Relationship between swelling maximum and mechanical properties of various vulcanised rubbers. (I.R.I. Trans., 1929, <u>5</u> , 113, Fig. 4. Swelling maximum is plotted against hardness and elongation at 0.75 kg/mm ² of rubbers compounded with (a) whiting, (b) gas black, (c) glue, (d) magnesium carbonate, (e)	8.2x8.2

			litharge, (f) zinc oxide. The relationship for barytes is given for the latter property only.)	
Glass Negatives - Box 211 to 376	RUBB/333	c.1900	333 Graph of swelling maximum against volume percentage filler. Effect on increasing content of fillers on the swelling maximum of vulcanised rubber. (I.R.I. Trans., 1929, <u>5</u> , 108, Fig.3. Curves are given for barytes, whiting, magnesium carbonate, glue, zinc oxide, litharge and gas black.)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/334	c.1900	334 Tabulation. Chemical properties of samples of gas balck, acetylene black and lampblack. (I.R.I. Trans., 1929, <u>5</u> , 49, Table I. Properties given are: moisture, ash and carbon contents; nitrogen (total and calculated as NH4); sulphur (total and calculated as SO4); acetone, ether, and water extracts.)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/335	c.1900	335 Tabulation. Physical properties of samples of gas black, acetylene black, and lampblack. (I.R.I. Trans., 1929, <u>5</u> , 51, Table II. Properties given are: colour, pigmenting powder, bulk, specific gravity, particle sizes in alcohol: water, Brownian movement.)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/336	c.1900	336 Graph of centimetres settled against hours. Sedimentation of acetylene black, gas black and lampblack in 50% alcohol. (I.R.I. Trans., 1929, <u>5</u> , 52, Fig.1)	8.2x8.2

Glass Negatives - Box 211 to 376	RUBB/337	c.1900	337 Graph of kilos/mm ² against carbon black% by weight. Change in tensile strength of vulcanised rubber with increasing quantities of acetylene black, gas black and lampblack. (I.R.I.Trans., 1929, 5, 52, Fig.2)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/338	c.1900	338 Graph of elongation (%) against carbon black % by weight. Change in elongation at 0.75 kg/mm ² of vulcanised rubber with increasing quantities of acetylene black, gas black and lampblack (I.R.I. Trans., 1929, 5, 55, Fig.3)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/339	c.1900	339 Graph of foot.lbs/cubic inch against carbon black (%) by weight. Change in energy absorbed to rupture of vulcanised rubber containing increasing quantities of acetylene black, gas black and lampblack. (I.R.I. Trans., 1929, 5, 56, Fig.4)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/340	c.1900	340 Graph of permanent set % against carbon black % by weight. Change in permanent set of vulcanised rubbers containing increasing quantities of acetylene black, gas black and lampblack. (I.R.I. Trans., 1929, 5, 56, Fig.5)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/341	c.1900	341 Graph of durometer numbers against carbon black % by weight. Change in hardness of vulcanised rubbers containing increasing quantities of acytelene black, gas black and lampblack. (I.R.I. Trans., 1929, 5, 57, Fig. 6)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/342	c.1900	342 Graph of scleroscope numbers against carbon black % by weight. Change in scleroscope resilience of vulcanised rubbers	8.2x8.2

			containing increasing quantities of acytelene black, gas black and lampblack. (I.R.I. Trans., 1929, <u>5</u> , Fig.7)	
Glass Negatives - Box 211 to 376	RUBB/343	c.1900	343 Tabulation. Per cent difference of vulcanised rubbers containing 15% acytelene black and 15% gas black from those containing 15% lampblack. (I.R.I. Trans., 1929, <u>5</u> , 59, Table III. Properties listed are: tensile strength, % elongation at 0.75 kg/mm ² , rigidity, reinforcing power, permanent set, specific gravity, hardness.)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/344	c.1900	344 Tabulation. Per cent difference of vulcanised tire tread rubbers containing gas black and acytelene black from those containing lampblack. (I.R.I. Trans., 1929, <u>5</u> , 60, Table V. Properties listed are: tensile strength, % elongation at 0.75 kg/mm ² , rigidity, permanent set, hardness.)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/345	c.1900	345 Graph of elongation %-kilos per mm ² against minutes cure. Discontinuity in the vulcanisation of rubbers containing carbon black in the presence of hexamethylenetetramine. (I.R.I. Trans., 1929, <u>5</u> , 62, Fig.8. The curves relate to tensile strength and % elongation at 0.5 kg/mm ² of accelerated rubbers containing gas black, acytelene black and lampblack.)	8.2x8.2

Glass Negatives - Box 211 to 376	RUBB/346	c.1900	346 Graph of permanent set % against minutes cure. Discontinuity in the vulcanisation of rubbers containing carbon black in the presence of hexamethylenetetramine. (I.R.I. Trans., 1929, <u>5</u> , 63, Fig. 9 The curves relate to hardness and permanent set of accelerated rubbers containing gas black, acetylene black and lampblack.)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/347	c.1900	347 Graph of reduction in time of cure as % of accelerators cure against accelerators with 1 % ZNO. Effect of acytelene black, gas black and lampblack on reduction of time of cure by organic accelerators in the presence of 10% zinc oxide. (I.R.I. Trans., 1929, <u>5</u> , 64 Fig. 10. Accelerators studied are: p-nitrosodimethylaniline, hexamethylenetetramine, diphenylguanidine and piperidine piperidine -l-carbothionolate.)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/348	c.1900	348 Tabulation: Variability of acetylene black. Differences in mechanical properties of rubber compounded with 6 different batches. (I.R.I.Trans., 1929, <u>5</u> , 67, Table VIII. :Properties studied are: elongation at 0.75% kg/mm ² , rigidity, hardness, reinforcing energy, tensile strength, % elongation at break, permanent set, resilience and permanent set after rupture. The last property is not included in the reference given above.)	8.2x8.2

Glass Negatives - Box 211 to 376	RUBB/349	c.1900	349 Storage tube for drying small sample of rubber in vacuo. (I.R.I. Trans., 1929, 5, 74, Fig.1)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/350	c.1900	350 Diagram of apparatus for filtering rubber solution out of contact with air.	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/351	c.1900	351 Tabulation. Contents of carbon and hydrogen of samples of purified rubber, gutta-percha and balata. (I.R.I. Trans., 1929, 5, 75, Table I.)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/352	c.1900	352 Tabulation. Heats of combustion of purified rubber, gutta-percha and balata. (I.R.I. Trans., 1929, 5, 76, Table II.)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/354	c.1900	354 Tabulation. Heats of combustion for masticated rubber and rubber exposed to sunlight. (I.R.I. Trans., 1929, 5, 80, Table III.)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/357	c.1900	357 Rubber surgical appliances used by Dr Gabriel. ("Manuel du fabricant d'objects en caoutchouc, gutta-percha et gomme factice", 1855, Plate 2)	8.2x10.8
Glass Negatives - Box 211 to 376	RUBB/358	c.1900	358 Hot-water bottle manufacture. Mould. Close up photograph	8.2x10.8
Glass Negatives - Box 211 to 376	RUBB/359	c.1900	359 Hot-water bottle manufacture. Uncured rubber in place in the mould. Close up photograph	8.2x10.8
Glass Negatives - Box 211 to 376	RUBB/360	c.1900	360 Hot-water bottle manufacture. Mould ready for the press. Close up photograph	8.2x10.8
Glass Negatives - Box 211 to 376	RUBB/361	c.1900	361 Hot-water bottle manufacture. Mould in the press. (Salford) Limited Engineers. Close up photograph	8.2x10.8

Glass Negatives - Box 211 to 376	RUBB/362	c.1900	362 Hot-water bottle manufacture. Opened mould with vulcanised bottle in situ. Close up photograph	8.2x10.8
Glass Negatives - Box 211 to 376	RUBB/363	c.1900	363 Hot-water bottle manufacture. Stripping vulcanised bottle from the ore. Close up photograph	8.2x10.8
Glass Negatives - Box 211 to 376	RUBB/365	c.1900	365 Automatic round-block cutting machine. Close up photograph	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/366	c.1900	366 Machine for cold- vulcanising proofed fabric; lead covered with iron frameworks. Advertisement.	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/367	c.1900	367 Manufacture of rubber gloves by dipping (glove- forms in position for dipping). Dipping room and process. (I.R.W., 1921, <u>64</u> , 719, Fig.7. The forms are shown in position for dipping, and inverted for drying).	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/368	c.1900	368 Battery of dipping machines with solvent recovery installation. The solution tank is big enough to suffice for 4 to 6 machines. (Schrim & Co.) (I.R.J., 1926, <u>71</u> , 720, Fig.3)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/369	c.1900	369 Dipping apparatus for cold vulcanisation (Fig.7). (Schrim & Co.). (I.R.J., 1926, 71, 780, Fig.7)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/370	c.1900	370 Diagram of detailed connections for resistance measurement of hard rubber, soft rubber and other high grade insulation (I.R.I. Trans., 1930, 6, 92, Fig.4)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/371	c.1900	371 Graph of resistance plotted against time after application of potential. Comparison of mercury and aquadag electrodes in measuring resistance of hard rubber. (I.R.I. Trans.,	8.2x8.2

			1930, <u>6</u> , 86, Fig.1)	
Glass Negatives - Box 211 to 376	RUBB/372	c.1900	372 Graph of effect of water in aquadag on volume resistivity determination of soft rubber. (I.R.I. Trans., 1930, <u>6</u> , 90, Fig.3. Apparent volume resistivity is plotted against time after application of potential).	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/373	c.1900	373 Graph of resistance plotted against time after application of potential. Effect of water in aquadag on surface resistivity determination in hard rubber. (I.R.I. Trans., 1930, <u>6</u> , 88, Fig. 2. Curves are given showing change of resistance with time after application of potential, and the influence of applying aquadag.)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/374	c.1900	374 Sectional diagram illustrating principle of R.A.B.R.M. hardness tester. (I.R.I. Trans., 1930, <u>6</u> , 66, Fig.2)	8.2x8.2
Glass Negatives - Box 211 to 376	RUBB/375	c.1900	375 R.A.B.R.M. Hardness tester in use with rubber discs as sample. (I.R.I. Trans., 1930, <u>6</u> , facing p. 68, Fig.3)	8.2x10.8
Glass Negatives - Box 211 to 376	RUBB/376	c.1900	376 R.A.B.R.M. Hardness tester in use on rubber-covered roll (I.R.I. Trans., 1930, <u>6</u> , facing p. 68, Fig. 4)	8.2x10.8
Glass Negatives - Box 377 to 570	RUBB/377	c.1900	377 Sectional diagram illustrating principle of R.A.B.R.M. thickness gauge. (I.R.I. Trans., 1930, <u>6</u> , 75, Fig. 7)	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/378	c.1900	378 R.A.B.R.M. Thickness gauge ready for use. (I.R.I. Trans., 1930, <u>6</u> , facing p. 75, Fig. 5)	8.2x10.8

Glass Negatives - Box 377 to 570	RUBB/379	c.1900	379 R.A.B.R.M. Thickness gauge in use, measuring a Schopper ring. (I. R. I. Trans., 1930, <u>6</u> , facing p.75, Fig. 6)	8.2x10.8
Glass Negatives - Box 377 to 570	RUBB/380	c.1900	380 Graph of indentation in mm/100 plotted against load in gr. Relation between load and indentation in hardness testing of vulcanised rubber using the R.A.B.R.M. instrument. (I.R.I. Trans., 1930, 6, 65, Fig. 1)	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/382	c.1900	382 Portrait of P. Schidrowitz. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/383	c.1900	383 Portrait of S.S. Pickles. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/384	c.1900	384 Portrait of H.P. Stevens. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/385	c.1900	385 Portrait of W.B. Wiegand. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/386	c.1900	386 Portrait of C.D. Harries. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/387	c.1900	387 Portrait of B.D. W.Luff. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/388	c.1900	388 Portrait of F.A. Hauser. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/389	c.1900	389 Portrait of R.W. Lunn. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/390	c.1900	390 Portrait of O. de Vries. Close up photograph	8.2x8.2

Glass Negatives - Box 377 to 570	RUBB/391	c.1900	391 Portrait of P.B. Cow. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/392	c.1900	392 Portrait of F. Kaye. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/393	c.1900	393 Portrait of R. Pummerer. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/394	c.1900	394 Graph. Effect of protective coatings on ageing of vulcanised rubber. (I.R.I. Trans., 1931, <u>7</u> , 106, Fig.1. Curves are given for change of tensile strength of vulcanised rubber protected by various preservative paints).	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/395	c.1900	395 Tabulation. Tensile strength of tubing stored for 15 months in various fluids. (I.R.I. Trans., 1931, <u>7</u> , 97, Table I. The fluids investigated are air alone, air and amonia, 1% soda solution, 2% boric acid solution, 70 % alcohol, lime water, 10% glycerin solution, distilled water, air and petroleum vapour.)	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/396	c.1900	396 Tabulation. Effect of preservative paints in natural ageing of vulcanised rubber. (I.R.I. Trans., 1931, <u>7</u> , 107, Table II. Figures are given for breaking load and elongation of a tire mix and a red tube mix, for the fresh rubbers and after storage in England and India for 3 and 12 months.)	8.2x8.2

Glass Negatives - Box 377 to 570	RUBB/397	c.1900	397 Graph. Influence of rate of stretching on load at 300% elongation in tensile testing of vulcanised rubber. (Data from R. Dorey: Influence of rate of stretching in tensile testing, I.R.I. Trans., 1931, <u>7</u> , 158. Curves are given relating the above property to rate of stretching in rubbers containing (a) magnesium carbonate, (b) litharge, (c) clay and (d) carbon black, all vulcanised for four different times.)	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/398	c.1900	398 Graph. Influence of rate of stretching on load at 300% elongation in tensile testing of vulcanised rubber. (See note for RUBB/397. Curves are given relating the above property to rate of stretching in rubbers containing (a) zinc oxide, (b) antimony sulphide, (c) barytes, and (d) whiting, and for the 95:5 rubber- sulphur parent mix, all vulcanised for four different times.)	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/399	c.1900	399 Graph. Influence of rate of stretching on tensile strength in tensile testing of vulcanised rubber. (See note for RUBB/397. Curves are given relating the above property to rate of stretching in rubbers containing (a) magnesium carbonate, (b) litharge, (c) clay and (d) carbon black, all vulcanised for four different times.)	8.2x8.2

Glass Negatives - Box 377 to 570	RUBB/400	c.1900	400 Graph. Influence of rate of stretching on tensile strength in tensile testing of vulcanised rubber. (See note for RUBB/397. Curves are given relating the above property to rate of stretching in rubbers containing (a) zinc oxide, (b) antimony sulphide, (c) barytes, (d) whiting, and for the 95:5 rubber-sulphur parent mix, all vulcanised for for different times.)	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/401	c.1900	401 Graph. Influence of rate of stretching on % elongation at 0.5% kg/mm ² , as % of mean, in tensile testing of vulcanised rubber. (I.R.I. Trans., 1931, <u>7</u> , 166, Fig.4. Curves are given relating the above property to rate of stretching in rubbers containing (a) magnesium carbonate, (b) carbon black, (c) clay, (d) litharge, (e) antimony sulphide, (f) zinc oxide, (g) whiting, (h) barytes, and for the 95:5 rubber-sulphur parent mix, all vulcanised for four different times.)	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/402	c.1900	402 Graph. Influence of rate of stretching on tensile strength, as % of mean, in tensile testing of vulcanised rubber. (I.R.I. Trans., 1931, <u>7</u> , 164, Fig.2. Curves are given relating the above property to rate of stretching in rubber containing (a) magnesium carbonate, (b) carbon black, (c) clay, (d) litharge, (e) antimony sulphide, (f) zinc oxide, (g) whiting, (h) barytes, and for the 95:5 rubber-sulphur parent mix, all vulcanised for four different times.)	8.2x8.2

Glass Negatives - Box 377 to 570	RUBB/403	c.1900	403 Rubber trees in Brazil. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/404	c.1900	404 Tapping rubber tree. State of Amazonia. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/406	c.1900	406 Rubber for export in interior of Amazonia. Mid - shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/408	c.1900	408 Rubber reclaiming. General view of works of Northwestern Rubber Co., Litherland. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/409	c.1900	409 Rubber reclaiming. Old motor outer covers awaiting treatment. Mid- shot photograph	8.2x10.8
Glass Negatives - Box 377 to 570	RUBB/410	c.1900	410 Rubber reclaiming. Old inner tubes awaiting treatment. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 377 to 570	RUBB/411	c.1920	411 Rubber reclaiming. Grinding mills. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/412	c.1920	412 Rubber reclaiming. Sheeting mills. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/413	c.1920	413 Rubber reclaiming. Finished product. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/414	c.1920	414 Sir H. Wickham. Memorial bust. (Bull. R.G.A., 1931, 13, 547.)	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/415	c.1920	415 Sir H. Wickham standing beside the oldest rubber tree in Ceylon, which produced 240lb. dry rubber in 1909-11, a world's record. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377	RUBB/416	c.1920	416 Diagram of apparatus for measuring water absorption by rubber from an atmosphere	8.2x8.2

to 570			of constant humidity. (Data from H. A. Daynes: Measurement of water absorption by rubber, I.R.J., 1932, 84, 376.)	
Glass Negatives - Box 377 to 570	RUBB/417	c.1920	417 Graph. Water absorption by raw rubber at various humidities. (See negative RUBB/416. Curves show the water-absorption by smoked sheet, crepe, Para and Hopkinson sprayed latex rubbers in atmospheres of various relative humidities.)	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/418	c.1920	418 Graph. Water absorption by smoked sheet at various humidities. (See negative RUBB/416. Time-water absorption curves are given for smoked sheet in atmospheres of 75.2%, 84.8% and 97.3% relative humidities.)	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/419	c.1920	419 Tabulation. Water absorption by typical raw and vulcanised rubbers at various humidities. (See negative RUBB/416. Figures are given for smoked sheet, crepe, Para, and Hopkinson sprayed latex rubbers, for vulcanised latex sheet, a shoe stock containing acid reclaim, a tire stock containing alkali reclaim, and for a high and a low grade ebonite at 75.2%, 84.8% and 97.3% relative humidity.)	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/420	c.1920	420 Graph. Water absorption by vulcanised rubbers at various humidities. (See negative RUBB/416. Water absorption is plotted against relative humidity for vulcanised latex sheet, a shoe stock containing acid reclaim, a tire stock containing alkali reclaim, and a high and a low grade	8.2x8.2

			ebonite.)	
Glass Negatives - Box 377 to 570	RUBB/421	c.1920	421 Masticator in use today (circa 1920). Mid- shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/422	c.1920	422 Healey-Shaw cycle-tyre- building machine. Francis Shaw & Co. Ltd. Bradford, Manchester. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/423	c.1920	423 Thropp tyre building machine for low pressure tyres, showing steel stitcher and rubber stitcher. Francis Shaw & Co. Ltd. Bradford, Manchester. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/424	c.1920	424 Sykes double helical gear cutter. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/425	c.1920	425 Sykes double helical gear cutter. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/426	c.1920	426 Bud grafting. Preparing the stock. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/427	c.1920	427 Bud grafting. Preparing the bud slip. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/428	c.1920	428 Bud grafting. Trimming the bud slip. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/429	c.1920	429 Bud grafting. Stripping the bud-patch. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/430	c.1920	430 Bud grafting. Trimming the bud-patch. Close up photograph	8.2x8.2

Glass Negatives - Box 377 to 570	RUBB/431	c.1920	431 Bud grafting. Inserting the bud-patch. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/432	c.1920	432 Bud grafting. Binding the budding. I. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/433	c.1920	433 Bud grafting. Binding the budding. II. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/434	c.1920	434 Bud grafting. Binding the budding. III. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/435	c.1920	435 Bud grafting. Protection of the completed budding; I. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/436	c.1920	436 Bud grafting. Protection of the completed budding; II. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/437	c.1920	437 Bud grafting. Opening the budding. I. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/438	c.1920	438 Bud grafting. Opening the budding. II. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/439	c.1920	439 Bud grafting. Ringing. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/440	c.1920	440 Bud grafting. Cutting back the stock. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/441	c.1920	441 Receiving latex at factory. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 377 to 570	RUBB/442	c.1920	442 Rubber seedlings planted in multiplication beds for budding. Mid -shot photograph	8.2x8.2

Glass Negatives - Box 377 to 570	RUBB/443	c.1920	443 Rubber estate showing silt pits and bunds for prevention of soil erosion. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/444	c.1920	444 Young rubber trees on hilly land, showing terraces and cover crops to prevent soil erosion. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/445	c.1920	445 Mature rubber trees on flat land. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/446	c.1920	446 Tamil women bringing latex from field to factory. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/447	c.1920	447 Rubber Research Institute of Malaya. Mid - shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/448	c.1920	448 Pollinating flowers of rubber trees. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/449	c.1920	449 Rubber tree inflorescence showing male and female flowers. Mid - shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/450	c.1920	450 Rubber tree inflorescence showing female flowers at tips of branches. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/451	c.1920	451 Young shoot or tip of branch showing inflorescence of rubber trees. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/452	c.1920	452 Young budding of rubber plant. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/453	c.1920	453 Young budding of rubber plant showing final pruning of stock.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/454	c.1920	454 Section showing union of stock and scion and diseased area occluded by wound gum. Close up photograph	8.2x8.2

Glass Negatives - Box 377 to 570	RUBB/455	c.1920	455 Young budded tree (3-4 years old), Pilmoor clone A44. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/456	c.1920	456 One-year-old budded rubber plant. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/457	c.1920	457 Young budded rubber plants intermixed with ordinary seedling plants. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/458	c.1920	458 Longitudinal section of cortex of rubber tree showing latex vessels (black).	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/459	c.1920	459 Longitudinal section of stem tip of rubber plant.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/460	c.1920	460 Mouldy rot disease (sphaeronemia fimbriatum) fructifications.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/461	c.1920	461 Mouldy rot disease (sphaeronema fimbriatum) fructifications.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/462	c.1920	462 Sphaerostilbe repens (fungus disease) on bark of rubber tree with pad of coagulated latex attached. (The pad of coagulum is the white portion. The bark (dark portion) shows mycelium of fungus (white).	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/463	c.1920	463 Sphaerostilbe repens (fungus disease) on bark of rubber tree.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/464	c.1920	464 Diplodia (Pycnidium) on bark of rubber tree (fungus disease).	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/465	c.1920	465 Diplodia mycelium (fungus disease) in stem of rubber tree (longitudinal section).	8.2x8.2

Glass Negatives - Box 377 to 570	RUBB/466	c.1920	466 Fomes pseudoferreus (fungus disease), infected wood showing mycelium in vessels.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/467	c.1920	467 Fomes pseudoferreus. Transverse section wood of rubber plant showing breakdown of wood fibres and medullary rays.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/468	c.1920	468 Fomes pseudoferreus. Transverse section of infected root.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/469	c.1920	469 Fomes pseudoferreus. Transverse section of root showing fungus and cork proliferation.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/470	c.1920	470 Root disease of rubber trees showing danger of root contact with infected jungle stumps.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/471	c.1920	471 Root disease on rubber trees, showing danger of spread by root contact.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/472	c.1920	472 Fomes lignosus fructifications (root disease) on felled rubber tree stump.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/473	c.1920	473 Mycelium of fomes lignosus on jungle stump.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/474	c.1920	474 Mycelium of fomes lignosus in artificial culture.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/475	c.1920	475 Fomes pseudoferreus showing effect on roots of rubber trees. Adventitious root formation or proliferation.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/476	c.1920	476 Fomes pseudoferreus showing effect on roots of rubber trees. Adventitious root formation or proliferation. Mid -shot photograph	8.2x8.2

Glass Negatives - Box 377 to 570	RUBB/477	c.1920	477 Fructification of fomes pseudoferreus.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/478	c.1920	478 White thread blight fungus on branches of rubber tree.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/479	c.1920	479 White thread blight fungus on branches of rubber tree and leaves.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/480	c.1920	480 White thread blight fungus on leaf of rubber tree.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/481	c.1920	481 Sulphur-spraying-machine for treating Oidium Heveae (mildew disease). Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/482	c.1920	482 Fungus (Hypocrella sp.) growing on scale insects on rubber tree.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/483	c.1920	483 Chinese labourers straining latex. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/484	c.1920	484 Latex in pails. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/485	c.1920	485 Weighing latex. Mid - shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/486	c.1920	486 Tamil woman collecting latex and scrap rubber. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/487	c.1920	487 Showing method of adding sodium sulphite solution to latex in field to prevent or reduce premature coagulation.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/488	c.1920	488 Dirty latex collecting pails which cause fermentation of latex and premature coagulation. Close up photograph	8.2x8.2

Glass Negatives - Box 377 to 570	RUBB/489	c.1920	489 Proposed new type of latex strainer for downward and upward sieving. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/490	c.1920	490 Transferring latex from collecting pails to coagulating tanks. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/491	c.1920	491 Latex settling and bulking tanks and coagulating tanks. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/492	c.1920	492 Straining latex into coagulating tanks. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/493	c.1920	493 Placing partitions in coagulating tanks (after addition of coagulant). Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/494	c.1920	494 Latex coagulating tanks showing partitions removed and suspended on frames. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/497	c.1920	497 Determining dry-rubber-content of latex with an hydrometer graduated in lb. and oz. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/498	c.1920	498 Cement bulking and settling tanks (lined with glazed tiles showing transfer and straining of latex into coagulating tanks). Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/499	c.1920	499 Amount of sand, etc. settled from latex, with and without addition of sodium sulphite to reduce viscosity of latex.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/500	c.1920	500 Diagram of latex settling tank showing sloping bottom to collect sand.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/501	c.1920	501 Sand and bark particles passing through holes in 60 mesh sieve. Enlargement showing sand grains which will pass through 50, 60 and 100 mesh sieves.	8.2x8.2

Glass Negatives - Box 377 to 570	RUBB/502	c.1920	502 Coagulum being machined into "sheet" form. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/503	c.1920	503 Coagulum being machined into "sheet" form. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/504	c.1920	504 Removing coagulum from coagulating tanks preparatory to machining to sheet form. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/505	c.1920	505 Placing coagulum on small truck for conveyance to sheeting machines, showing deformation of coagulum due to bad handling. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/506	c.1920	506 Showing torn coagulum, due to careless handling. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/507	c.1920	507 Removing coagulum from coagulating tanks; cleaning partition of tanks. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/508	c.1920	508 Showing preliminary hand-rolling of coagulum. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/509	c.1920	509 Washing coagulating tanks and partitions. (Note type of partition with central dividing flange.) Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/510	c.1920	510 Chute with right-angle bend to convey coagulum from coagulating tanks to sheeting machines. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/511	c.1920	511 Machining coagulum to sheet form. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/512	c.1920	512 Factory showing chute for conveying coagulum to first sheeting machine and from first to second	8.2x8.2

			machine. Mid -shot photograph	
Glass Negatives - Box 377 to 570	RUBB/513	c.1920	513 General view of a sheeting factory. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/515	c.1920	515 Deformation of coagulum due to bad manipulation. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/516	c.1920	516 Coagulating tanks in sheeting factory. (Note battery of sheeting machines in line at further end). Mid shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/517	c.1920	517 Chute to convey coagulum to sheeting machines. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/518	c.1920	518 Chute to convey coagulum to sheeting machines. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/519	c.1920	519 Battery of sheeting machines in line. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/520	c.1920	520 Tanah Besih multiple roll sheeting machine. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/521	c.1920	521 Sheeting rolls in column driven by hand. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/522	c.1920	522 Sheeting rolls in column driven by hand. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/523	c.1920	523 Sheeting machines in cascade or column formation with conveyer belt to first machine. Near view.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/524	c.1920	524 Sheeting machines in cascade or column formation with conveyer belt to first machine. General view.	8.2x8.2

Glass Negatives - Box 377 to 570	RUBB/525	c.1920	525 Sheeting machines in cascade or column formation with conveyer belt to first machine. Mid -shot photograph.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/526	c.1920	526 Chute to first machine (fore-worker) and thence to sheeting machines in line. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/527	c.1920	527 Battery of light sheeting machines in line (ordinary lay-out). Rear view showing driving shaft.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/528	c.1920	528 Tanah Besih multiple roll machine in background with marking roll machines in foreground. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/529	c.1920	529 Sheet-foreroller. British patent N0.160166. Tanah Besih machine with foreworker (preliminary rolling machine for thick coagulum). Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/530	c.1920	530 General plan of elevation of the Tanah Besih sheetroller. Reineveld, Holland. Tanah Besih multiple roll machine, plan and elevation.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/531	c.1920	531 Sheeting rolls in column on table with separate marking machine in foreground. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/532	c.1920	532 Sheeting machine in line showing foreworker and chute or trough in front of machines to convey coagulum. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/533	c.1920	533 Tanah Besih multiple roll machine showing conveyer belt. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/534	c.1920	534 Hoare multiple roll sheeting machine. Close up photograph	8.2x8.2

Glass Negatives - Box 377 to 570	RUBB/535	c.1920	535 General view of estate factory with battery of light sheeting machines, coagulating tanks and Shanghai jars for bulking latex. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/536	c.1920	536 Battery of light sheeting machines with heavy crepeing machines on left. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/537	c.1920	537 Battery of crepeing machines with lumps of coagulum in foreground. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/538	c.1920	538 Sorting lower grade (scrap) rubber before machining to crepe. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/539	c.1920	539 Crepeing machines. (Note dark lower grade crepe and light pale crepe in front of machines). Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/541	c.1920	541 Factory showing small washing or soaking tanks for finished wet sheet and dripping racks. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/542	c.1920	542 Sheet hung to drip in open on lines. (This method of dripping in full sunlight is not recommended.). Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/543	c.1920	543 Smoke and heat distributor over furnace in smoke house. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/544	c.1920	544 Estate factory showing coagulating tanks, chute to machines and finished wet sheet on draining racks. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/545	c.1920	545 Sheet hanging in smoke house. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/546	c.1920	546 Termograph: combined graphs showing fluctuations in temperature at different positions from Monday to	8.2x8.2

			Saturday in Smoke House. Temperature chart in smoke house.	
Glass Negatives - Box 377 to 570	RUBB/547	c.1920	547 Exterior view of two-storey smoke house. Mid - shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/548	c.1920	548 Tamil women sorting smoked sheet and cutting out defects. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/549	c.1920	549 Tamil women sorting smoked sheet and cutting out defects. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/550	c.1920	550 Smoked sheet showing specks of dirt. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/551	c.1920	551 Smoked sheet showing white (partially smoked and dried) patches, due to excessive thickness caused by irregular machining. (Close view.)	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/552	c.1920	552 Smoked sheet showing white (partially smoked and dried) patches, due to excessive thickness caused by irregular machining. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/553	c.1920	553 Tamil man making up rubber packing cases from three-ply wood. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/554	c.1920	554 Cases of rubber, showing method of lining with rubber to prevent contamination of main bulk of rubber in cases. (Note also canvas bale of rubber on the right.) Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/555	c.1920	555 Packing shed, showing cases of rubber ready for export. (Note also two cases not yet closed showing excess of rubber to be pressed into cases by presses, and rubber linen	8.2x8.2

			overlapping sides. Each case contains 224lb. smoked sheet, 10 cases going to make 1 ton.). Mid -shot photograph	
Glass Negatives - Box 377 to 570	RUBB/556	c.1920	556 Diagram. Two-plate cavity moulds. (A, B, C, D).	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/557	c.1920	557 Mould massage roller. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/558	c.1920	558 Moulds for handle grips. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/559	c.1920	559 Ball moulds. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/560	c.1920	560 Mould, and cores for same. Mold for milking machine inflation. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/561	c.1920	561 Mould for pipe coupling. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/562	c.1920	562 Mould for bathing cap. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/563	c.1920	563 Mould for soles and heels. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/564	c.1920	564 Mould for heels. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/565	c.1920	565 Provan Works, Glasgow, Gas Dept., General View. May, 1932. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/566	c.1920	566 Provan Works, Glasgow, Gas Dept., showing 16 in. overhead gas mains with Victaulic joints. (Photographed May, 1932,	8.2x8.2

			after 11 years use.). Mid shot photograph	
Glass Negatives - Box 377 to 570	RUBB/567	c.1920	567 Portrait: J.G.Fol. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/568	c.1920	568 Portrait: Senator G.B. Pirelli. Close up photograph	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/569	c.1920	569 Graph pressure against temperature. Sublimed sulphur phase diagram.	8.2x8.2
Glass Negatives - Box 377 to 570	RUBB/570	c.1920	570 Drawing. Sublimed sulphur x 300 (Fig.1). Sublimed sulphur x 220 (on slide).	8.2x8.2
Glass Negatives - Box 571 to 760	RUBB/571	c.1920	571 Drawing. Precipitated sulphur x 300 (x 220 on slide).	8.2x8.2
Glass Negatives - Box 571 to 760	RUBB/572	c.1920	572 Drawing. Powdered roll sulphur x 300 (x 220 on slide).	8.2x8.2
Glass Negatives - Box 571 to 760	RUBB/573	c.1920	573 Photomicrograph. Sulphur bloom on rubber x 125 (on slide).	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/574	c.1920	574 Photomicrograph (30 diameters). Sulphur crystallising in vulcanised rubber x 21 (on slide).	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/575	c.1920	575 (2 negatives) Portrait. A. Van Rossem. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/576	c.1920	576 Portrait of W. A. Williams. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/577	c.1920	577 Portrait. BLJ. Eaton. (Pen and ink drawing).	8.2x10.8

Glass Negatives - Box 571 to 760	RUBB/578	c.1920	578 Apparatus (No. 1 to 11) on bench designed by R.A.B.R.M. (1932). Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/579	c.1920	579 Graph. Growth of stock 1927-1932 at R.A.B.R.M. Library. Plot of books, pamphlets, (curve 1) index cards and references in summary of current literature (curves 2 and 3) against years.	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/580	c.1920	580 Graph of enquiries and loans per year 1927-1932 at the R.A.B.R.M. Library. Plot of enquiries (curve 1) and loans (curve 2) against years.	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/581	c.1920	581 R.A.B.R.M. ground floor plan of laboratories. Typist room, private office, board room, laboratories No 1 and 2, miling and vulcanising room and library.	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/582	c.1920	582 Portrait. W.H.Paull. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/583	c.1920	583 W.H.Paull receiving form Sir G. Baharrel the Colwyn gold medal April 27, 1933. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/584	c.1920	584 Portrait. A. Spencer. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/585	c.1920	585 Portrait. H.H. Burton. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/586	c.1920	586 Portrait. F.G. Leahy. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/587	c.1920	587 Portrait. F. Pleger. Close up photograph	8.2x10.8

Glass Negatives - Box 571 to 760	RUBB/588	c.1920	588 Table of non- rubber constituents in raw rubber, percentages. (Moisture, acidity, water extract, acetone extract, protein and ash).	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/589	c.1920	589 Table. Raw rubber production, 1932. (Plantation: Malaya, Dutch East Indies, Ceylon, French Indo China, Sarawak, British N.Borneo, India, Siam; Wild: Brazil and Africa).	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/590	c.1920	590 Portrait. Major O.W.H.Briggs. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/591	c.1920	591Graph. Price and Japanese consumption in tons against years. Japanese consumption of raw rubber in relation to price.	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/592	c.1920	592 Graph. (2 negatives). Stress (kg/cm ²) against % strain. Stress-strain curves for vulcanised rubber.	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/594	c.1920	594 Effect of Hysteresis in solid rubber tyre. Close up photograph	6.2x8.9
Glass Negatives - Box 571 to 760	RUBB/595	c.1920	595 Geer oven containing rings for ageing. Close up photograph	6.2x8.9
Glass Negatives - Box 571 to 760	RUBB/596	c.1920	596 Graph of buffer and stroke (height in inches) against load in tons. Compression of rubber and steel buffing springs.	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/597	c.1920	597 Portrait. D. Matz (Founder of D.Matz & Sons, D. Matz (Manchester), Ltd., and Martin Waterproof & Leatherwear Co., Ltd.). Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/598	c.1920	598 Forster rubber ringed joint (with broken socket) brought in from Hexham Road (West Wylam) 1932, June 28th. (Main has been in	8.2x10.8

			ground for over 60 years). Close up photograph	
Glass Negatives - Box 571 to 760	RUBB/599	c.1920	599 Portrait. H.D. Cowen. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/600	c.1920	600 Portrait. J.G. Hay. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/601	c.1920	601 Portrait. N.C.S. Bosanquet. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/602	c.1920	602 Portrait. Sir Montague Hughman. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/603	c.1920	603 Portrait. Sir Herbert Wright. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/604	c.1920	604 Portrait. H.C. Young. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/605	c.1920	605 Portrait. A.C. Hymans. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/606	c.1920	606 Portrait. J. Haworth (signed). Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/607	c.1920	607 Portrait. J. McDowell. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/608	c.1920	608 Portrait. H.L. Kenward. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/609	c.1920	609 Portrait. F.H. Sprang. (Chairman of Heinke's. Vice P., R.A.B.R.M.). Close up photograph	8.2x10.8

Glass Negatives - Box 571 to 760	RUBB/610	c.1920	610 Portrait. Sir S. Chapman (Economic adviser to Baldwin Administration with Sir H. Hambling, advised abolition of Restriction). Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/611	c.1920	611 Portrait. Sir H. Hambling. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/612	c.1920	612 Portrait. G.J. Thomas (Monarch Rubber Co.). Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/613	c.1920	613 Portrait. F.D. Ascoli. From the painting by Philip Conrad, R.A.. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/614	c.1920	614 Portrait. J. Tinto. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/615	c.1920	615 Portrait. B.H. Binder (Chairman. I.R.G.P.). Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/616	c.1920	616 Portrait. F. Webster. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/617	c.1920	617 Nordac rubber lined plug type acid valve (cut away to show lining). Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/618	c.1920	618 Experimental silk washing apparatus (Vulcoferran). Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/619	c.1920	619 Vulcoferran lined and covered valves and fittings for pickling tanks. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/620	c.1920	620 Pickling tank lined with Nordac acid resisting sheet rubber and 9'' thick acid resisting blocks. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571	RUBB/621	c.1920	621 Non-return ball valve lined with Nordac acid resisting sheet rubber. (two	8.2x10.8

to 760			on bench). Close up photograph	
Glass Negatives - Box 571 to 760	RUBB/622	c.1920	622 Nordac patent bellows type glandless acid valve (rubber lined). A cut-away perspective view of the valve showing all the salient features.	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/623	c.1920	623 Method of lining tanks with Nordac sheet rubber and protecting layer of acid tiles mechanically supported by patent method of interlocking. (3 diagrams)	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/624	c.1920	624 Nordac patent rubber concrete storage tanks lined with Nordac acid resisting sheet rubber. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/625	c.1920	625 Diagrams: Fig. 2, Fig. 3, Fig. 4 . Method of lining wood tanks with sheet rubber. Fig. 2: Birdsmouth joint. Fig. 3: Birdsmouth joint filled with Nordac patent rubber cement junction and covered with sheet rubber. Fig. 4: Shows how rubber would sink between joints when wood shrinks and Nordac rubber cement and birdsmouth joints are not employed.	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/626	c.1920	626 Vulcanisation of rubber lining in a large open-process tank by means of boiling water. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/627	c.1920	627 Application of unvulcanised rubber lining compound in sheet form to a steel pickling tank. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/628	c.1920	628 Application of special adhesive to a steel pickling tank (worker on picture). (Solvent fumes necessitate the use of gas masks during this operation). Mid -shot	8.2x10.8

			photograph	
Glass Negatives - Box 571 to 760	RUBB/629	c.1920	629 Sand-blasting interior of a steel pickling tank in preparation for rubber lining. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/630	c.1920	630 Interior view of one of the 32 000 gal. tanks. Approximately 1800 sq.ft. (1720 lb) of 3/16 in. rubber lining were used in each tank. Inside dimensions, 11ft. In diameter, 48 ft. long. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/631	c.1920	631 One of the 32 000 gal. tanks. Hydrochloridic acid storage units in the United States before rubber lining. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/632	c.1920	632 Modified pump casing lined with "Linatex" rubber as used for pumping acid and abrasive solutions (front view). Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/633	c.1920	633 Modified pump casing lined with "Linatex" rubber as used for pumping acid and abrasive solutions. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/634	c.1920	634 Rubber lined steel tube for carrying acid gases. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/635	c.1920	635 Portrait. D.F. Twiss. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/636	c.1920	636 Portrait of J.D.Hooker. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/637	c.1920	637 Portrait of W.I.Hooker. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/638	c.1920	638 Mathematical model of structure of Ebonite (curve). (Set % against temperature)	8.2x10.8

Glass Negatives - Box 571 to 760	RUBB/639	c.1920	639 Set-temperature curves for rubber-wax model (Experimental) (Curves: Set against temperature).	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/640	c.1920	640 Graph. Set against temperature. Permanent set of Ebonite at constant torsional strain.	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/641	c.1920	641 Permanent set apparatus for Ebonite. Diagram.	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/642	c.1920	642 Graphical representation of internal heating of Ebonite during vulcanisation. Curve: heat produced; straight line: heat dissipated. Graph of rate of heat production or loss against temperature.	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/643	c.1920	643 Portrait. J. Fairbairn. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/644	c.1920	644 Portrait. W.F.V. Cox. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/645	c.1920	645 Rubber lined railway tank and storage tank for acids. Old method. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/646	c.1920	646 Rubber lined railway tank and storage tank for acids. New method. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/647	c.1920	647 Manufacture of Revertex (tanks). Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/648	c.1920	648 (set of 5 machines). Vulcanising equipment at the R.A.B.R.M. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/649	c.1920	649 Portrait. H.H. Burton. Close up photograph	8.2x10.8

Glass Negatives - Box 571 to 760	RUBB/650	c.1920	650 Portrait. W.J. Gallagher. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/652	c.1920	652 Ebonite lined vessels used in the manufacture of disinfectants. (Dunlop Rubber Co., Ltd.). Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/653	c.1920	653 Portrait. F.G. Smith (signed). Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/654	c.1920	654 Portrait. Col. A.P. Pyne (signed). Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/655	c.1920	655 Manufacture of rubber lined equipment. Railway tank (Leyland). Mid -shot photograph	8.2x8.2
Glass Negatives - Box 571 to 760	RUBB/656	c.1920	656 Manufacture of rubber lined equipment. Cylindrical acid tanks at makers work. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 571 to 760	RUBB/657	c.1920	657 Manufacture of rubber lined equipment. Cylindrical acid tank in use. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 571 to 760	RUBB/658	c.1920	658 Manufacture of rubber lined equipment. Rubber lined wooden trough. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 571 to 760	RUBB/659	c.1920	659 Manufacture of rubber lined equipment. Metal tank ready for receiving rubber. Close up photograph	8.2x8.2
Glass Negatives - Box 571 to 760	RUBB/660	c.1920	660 Manufacture of rubber lined equipment. Rubber lined sink. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 571 to 760	RUBB/661	c.1920	661 Manufacture of rubber lined equipment. Shallow trough - rubber lined. Close up photograph	8.2x8.2
Glass Negatives - Box 571 to 760	RUBB/662	c.1920	662 Portrait. E.C. Lacey. Close up photograph	8.2x10.8

Glass Negatives - Box 571 to 760	RUBB/663	c.1920	663 Portrait. Major J.H. Mandelberg. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/664	c.1920	664 Table. E.R.A. Inflammability tests on hard rubber.	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/665	c.1920	665 Diagram. Plan of base.(front elevation; end elevation). French furnace for testing inflammability of rubber.	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/666	c.1920	666 Diagram. "Fire-Tube" inflammability testing apparatus.	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/667	c.1920	667 (with 4 films) B.S.I. Inflammability testing apparatus. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/668	c.1920	668 Table. Extinction of strips of rubber on withdrawal from flame.	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/669	c.1920	669 Typical results in B.S.I. Inflammability tests on rubber.	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/670	c.1920	670 Table. (samples 1 to 16). Water absorption of fireproofed rubbers.	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/671	c.1920	671 Tyre testing machine. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/672	c.1920	672 Spreading machine for textiles. John Dowhan & Co. Makers, Bury. Close up photograph	8.2x8.2
Glass Negatives - Box 571 to 760	RUBB/673	c.1920	673 Spreading and dusting machine for textiles. Close up photograph	8.2x8.2
Glass Negatives - Box 571 to 760	RUBB/674	c.1920	674 Hydraulic bale cutter shown actually cutting a 2 wt. bale of smoked rubber sheet rubber. Mid -shot photograph	8.2x10.8

Glass Negatives - Box 571 to 760	RUBB/675	c.1920	675 The drug room showing the various constituents of a "mix" of rubber being weighed out in accordance with a chemical formula issued by the Laboratory. Mid -shot photograph.	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/676	c.1920	676 Mixing mill in operation (1st stage of mix), showing special control lamps. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/677	c.1920	677 Mixing mill in operation (approaching final stage of mix), showing special control lamps. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/678	c.1920	678 Special recording instruments in the Chart room which actually print the time of every "mix" of rubber and of the curing period of every tyre produced in the Factory. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/679	c.1920	679 "Close up" of recording instrument showing how time factor is recorded. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/680	c.1920	680 Spreading machines, shown applying the preliminary soaking coat of rubber to foundation fabric. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/681	c.1920	681 Breaker machine, used for warming up hard, tough tread stock before it is passed through the calendars. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/682	c.1920	682 Calendar, shown actually proofing the cotton cord foundation. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/683	c.1920	683 Calendar shown running "strip" material used for building up car tyres. Close up photograph	8.2x10.8
Glass Negatives - Box 571	RUBB/684	c.1920	684 Calendar shown profiling car treads. Mid -shot photograph	8.2x10.8

to 760				
Glass Negatives - Box 571 to 760	RUBB/685	c.1920	685 Weighing and inspecting Calendared tread stock before issue to the Tyre Building Section. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/686	c.1920	686 Machine showing building drum in collapsed position. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/687	c.1920	687 Putting on the first ply of foundation cord. Mid - shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/688	c.1920	688 (Autotype Works, The Autotype Co.Ltd., London W13). Showing next two plies in position, (see RUBB/687). Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/689	c.1920	689 Putting chafers and strips in position. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/690	c.1920	690 Putting pad rubber in position. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/691	c.1920	691 Putting profiled tread in position. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/692	c.1920	692 Final rolling process to make tyre structure homogenous. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/693	c.1920	693 Cutting impregnated cotton cord foundation on the bias before issue to car tyre Building Section. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/694	c.1920	694 Putting beads in position and turning edges of fabric over. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/695	c.1920	695 Rough shaping the tyre hydraulically. Close up photograph	8.2x10.8

Glass Negatives - Box 571 to 760	RUBB/696	c.1920	696 Fitting air bag to rough shaped cover. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/697	c.1920	697 Completed vulcanised tyres being taken from new pattern, hydraulically operated double-decker vulcanising press. Unvulcanised tyres with air bags in place on left of operator's feet. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/698	c.1920	698 Special temperature and time recording apparatus attached to each double-decker press and connected up with the instrument in the Chart room. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/699	c.1920	699 Inspecting and trimming tyres. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/700	c.1920	700 Spraying tyres with protective rubber paint. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/701	c.1920	701 Wrapping tyres (John Bull). Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/702	c.1920	702 Photomicrograph. Determination of water absorption of latex treated cloth.	8.2x8.2
Glass Negatives - Box 571 to 760	RUBB/703	c.1920	703 Cook's rubber ageing bomb. (Chas W.Cook & Sons). Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/704	c.1920	704 Kelvin, Bottomley & Baird Fugitometer. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/705	c.1920	705 Hanovia rubber ageing lamp. Close up photograph	8.2x10.8

Glass Negatives - Box 571 to 760	RUBB/706	c.1920	706 Sample chart (5 specimens). Rubber made with various accelerators. Before and after exposure to light.	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/707	c.1920	707 Stretched rubber showing surface cracks after ageing. (sample)	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/708	c.1920	708 Cutting off Profiled Tread. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/709	c.1920	709 Inner tube Splicing Machine. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/710	c.1920	710 Table. Silica in hard rubber. General properties (yield time, permittivity, power factor). Table I.	8.2x8.2
Glass Negatives - Box 571 to 760	RUBB/711	c.1920	711 Table. Silica in hard rubber. Various types of silica. Table II.	8.2x8.2
Glass Negatives - Box 571 to 760	RUBB/712	c.1920	712 Table. Silica in hard rubber. Concentration of silica (filler, plastic yield at 90 oC, impact strength, cross breaking strength, cross breaking elongation). Table III.	8.2x8.2
Glass Negatives - Box 571 to 760	RUBB/713	c.1920	713 Portrait. S.J.Peachey. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/714	c.1920	714 Gas filled rubber figure of Mickey Mouse as used at American carnivals. Mid - shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/715	c.1920	715 Gas filled rubber figure of a Bird as used at American carnivals. Mid - shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/716	c.1920	716 Gas filled rubber figure with a Pig's Head as used at American carnivals. Mid - shot photograph	8.2x10.8
Glass Negatives - Box 571	RUBB/717	c.1920	717 Gas filled rubber figure of a Dog as used at American carnivals. Mid -shot	8.2x10.8

to 760			photograph	
Glass Negatives - Box 571 to 760	RUBB/718	c.1920	718 Gas filled rubber figure of a Baby as used in American carnivals. Mid - shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/719	c.1920	719 Gas filled rubber figure of a Pig as used in American carnivals. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/720	c.1920	720 World Fair, Chicago: Model of Pre-Historic Animals made partly of rubber. View I. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/722	c.1920	722 World Fair, Chicago: Model of Pre-Historic Animals made partly of rubber. View II. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/723	c.1920	723 World Fair, Chicago: Model of other Pre-Historic Animals made partly of rubber. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/724	c.1920	724 World Fair, Chicago: Model of Pre-Historic Animals made partly of rubber. (The Tyrannosaurus Rex, of King of the tyrant reptiles). Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/725	c.1920	725 World Fair, Chicago: General view of Exhibition showing artificial vegetation, which incorporated rubber. Mid - shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/726	c.1920	726 Barnum's Museum: The rubber skinned man. Mid shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/727	c.1920	727 Barnum's Museum: Jenny Lind. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/728	c.1920	728 Barnum's Museum: Captive Whale display. Mid -shot photograph	8.2x10.8

Glass Negatives - Box 571 to 760	RUBB/729	c.1920	729 Barnum's Museum: Jumbo. "The only Mastodon on the Earth". (on stand). Mid - shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/731	c.1920	731 Flex Testing machine, Dupont Model. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/732	c.1920	732 Permanent set (constant elongation apparatus). Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/733	c.1920	733 Scott tensile Tester. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/734	c.1920	734 Punch for cutting Dumbbell Test Pieces. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/735	c.1920	735 Punch for cutting Schopper rings. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/736	c.1920	736 Punch for cutting Schopper rings. (working on bench). Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/737	c.1920	737 Scleroscope Resilience tester, in use on golf ball cor .(working on bench). Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/738	c.1920	738 Photomicrographic apparatus. (working on bench). Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/739	c.1920	739 High speed tensile tester. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/740	c.1920	740 Tabulation. Properties of vulcanised rubber. Effects of time of vulcanisation and of ageing. (Vulcn.mins.; pt.set 200%).	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/742	c.1920	742 Portrait. H.N.Ridley. (W.P.Stewart, Richmond) Close up photograph	8.2x10.8

Glass Negatives - Box 571 to 760	RUBB/743	c.1920	743 Photograph. H.N.Ridley and Sir John Twisen. Mid shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/747	c.1920	747 Cable braiding machine. (B & F Carter & Co., Rochdale). Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/748	c.1920	748 Portrait. Sir Harold Hartley. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/749	c.1920	749 Neoprene in the garage and service station. Petrol hose, gloves, apron and oil can for neoprene. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/750	c.1920	750 Neoprene in the aircraft industry. A coil of ignition cable, engine mountings, oil and water pump gaskets, and a range of sizes of washers, all made from neoprene. The thin rings at the foot are neoprene strip washers for wings. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/751	c.1920	751 Neoprene in the textile industry. A large Saunders diaphragm for textile plant, a range of roller ring washers and (to the left) a piece of neoprene covered wire for viscose silk spinning plant. Below, neoprene chemically - resistant carbey caps. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/752	c.1920	752 Neoprene products for use in the printing industry. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/753	c.1920	753 Neoprene in chemical engineering. Bucket, neoprene-lined vessel, U- bend, chemical workers' gloves, face piece of a gas mask and stoppers. Close up photograph	8.2x10.8

Glass Negatives - Box 571 to 760	RUBB/755	c.1920	755 Flexible non-brittle "ebonite" made from a mixture of neoprene and natural rubber. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/756	c.1920	756 Coagulated Neoprene latex. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/757	c.1920	757 Neoprene hose. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/758	c.1920	758 Neoprene (left) and natural rubber after subjection to ozone. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/759	c.1920	759 Neoprene and natural rubber after subjection to heat. Close up photograph	8.2x10.8
Glass Negatives - Box 571 to 760	RUBB/760	c.1920	760 Oil tanker with neoprene hose equipment. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 761 to 950	RUBB/761	c.1920	761Portrait. Sir William Tilden (1842-1926), the pioneer of synthetic rubber. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/762	c.1920	762 (Photomicrograph) Neoprene tyre sidewall (magnified three times) (of. 763).	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/763	c.1920	763 (Photomicrograph) Natural rubber tyre sidewall (magnified three times) (of. 762).	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/764	c.1920	764 Graph. Percentage increase weight against number of hours in diesel oil at 70 oC. Swelling of natural rubber, butadiene-acrylic nitrile inter-polymer, and neoprene in Diesel oil at 70 oC.	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/765	c.1920	765 Impact strength of hard rubber. Falling weight testing apparatus (showing sections 1 to 16). Close up photograph	8.2x8.2

Glass Negatives - Box 761 to 945	RUBB/766	c.1920	766 Graph. Proportion of breaks against impact blow per unit cross sectional area kg.cm/sq.cm. Impact strength of hard rubber. Proportion of breaks under various impact blows.	8.2x8.2
Glass Negatives - Box 761 to 945	RUBB/767	c.1920	767 Graph. Impact strength of hard rubber. Influence of vulcanisation time on impact strength (un-notched test-pieces). Impact strength against vulcanisation time in hours at 155 oC.	8.2x8.2
Glass Negatives - Box 761 to 945	RUBB/768	c.1920	768 Graph. Impact strength of hard rubber. Influence of vulcanisation time on impact strength (notched test-pieces). Impact strength against vulcanisation time in hours at 155 oC.	8.2x8.2
Glass Negatives - Box 761 to 945	RUBB/769	c.1920	769 Graph. Impact strength of hard rubber. Effect on impact strength of dimensions of unnotched test piece (1) Thickness (2) Width. Impact strength against 1) Thickness in mm. and 2) Width in mm.	8.2x8.2
Glass Negatives - Box 761 to 945	RUBB/770	c.1920	770 Graph. Impact strength of hard rubber. Impact strength against 1) Depth of notch in mm. and 2) Radius of notch in mm. Effect on impact strength. (1) Depth of notch. (2) Radius of notch.	8.2x8.2
Glass Negatives - Box 761 to 945	RUBB/771	c.1920	771 Petrol hose of thickel and motor car. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/773	c.1920	773 Pistol filling nozzle of thickel. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/774	c.1920	774 Gloves impregnated with thickel. Close up photograph	8.2x10.8

Glass Negatives - Box 761 to 945	RUBB/778	c.1920	778 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/779	c.1920	779 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/780	c.1920	780 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/781	c.1920	781 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/782	c.1920	782 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/783	c.1920	783 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/784	c.1920	784 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/785	c.1920	785 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/786	c.1920	786 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/787	c.1920	787 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/788	c.1920	788 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/789	c.1920	789 Portrait. Close up photograph	8.2x10.8

Glass Negatives - Box 761 to 945	RUBB/790	c.1920	790 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/791	c.1920	791 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/792	c.1920	792 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/793	c.1920	793 Portrait. (Swan Watson F.R.P.S.) Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/794	c.1920	794 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/795	c.1920	795 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/796	c.1920	796 Portrait. J.Wilderma. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/797	c.1920	797 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/798	c.1920	798 Portrait. (Harcourt) Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/799	c.1920	799 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/800	c.1920	800 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/801	c.1920	801 Portrait. (Blank & Stoller Photo). Close up photograph	8.2x10.8

Glass Negatives - Box 761 to 945	RUBB/802	c.1920	802 Portrait. Mr. H. F. Parfitt. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/803	c.1920	803 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/804	c.1920	804 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/805	c.1920	805 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/806	c.1920	806 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/807	c.1920	807 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/808	c.1920	808 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/809	c.1920	809 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/810	c.1920	810 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/811	c.1920	811 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/812	c.1920	812 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/813	c.1920	813 Portrait. Close up photograph	8.2x10.8

Glass Negatives - Box 761 to 945	RUBB/814	c.1920	814 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/815	c.1920	815 Portrait. (signed in the corner). Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/816	c.1920	816 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/817	c.1920	817 Portrait of A.E. Tanner. (In fair round belly, with eyes severe and beard of formal cut, full of wise saws and modern instances). Signed at the bottom. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/818	c.1920	818 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/819	c.1920	819 Portrait. (Susie Stern Studio). Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/820	c.1920	820 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/821	c.1920	821 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/822	c.1920	822 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/823	c.1920	823 Portrait. H. Bressenbrugge, den Haag. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/824	c.1920	824 Portrait. C.Warner, 1946. (Signed). Close up photograph	8.2x10.8
Glass Negatives - Box 761	RUBB/825	c.1920	825 Portrait. Close up photograph	8.2x10.8

to 945				
Glass Negatives - Box 761 to 945	RUBB/826	c.1920	826 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/827	c.1920	827 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/828	c.1920	828 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/829	c.1920	829 Portrait. Bachrach. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/830	c.1920	830 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/831	c.1920	831 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/832	c.1920	832 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/833	c.1920	833 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/834	c.1920	834 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/835	c.1920	835 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/836	c.1920	836 Portrait. Close up photograph	8.2x10.8

Glass Negatives - Box 761 to 945	RUBB/837	c.1920	837 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/838	c.1920	838 Portrait. (signed). Gertrude and Idi Wyck Gray. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/839	c.1920	839 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/840	c.1920	840 Portrait. (4 R. P. 'des Champs Elysees. Portraits Gaston. Lucien Manuel). Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/841	c.1920	841 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/842	c.1920	842 Portrait. F. Lion. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/843	c.1920	843 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/844	c.1920	844 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/845	c.1920	845 Portrait. Joseph Forster. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/846	c.1920	846 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/847	c.1920	847 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/848	c.1920	848 Portrait. Close up photograph	8.2x10.8

Glass Negatives - Box 761 to 945	RUBB/849	c.1920	849 Portrait. G. Le Maistre. C.B.E. F.C.G.I. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/850	c.1920	850 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/851	c.1920	851 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/852	c.1920	852 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/853	c.1920	853 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/854	c.1920	854 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/855	c.1920	855 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/856	c.1920	856 Portrait. (Graveley & Moore, Charleston, W. VA.). Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/857	c.1920	857 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/858	c.1920	858 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/859	c.1920	859 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/860	c.1920	860 Portrait. Close up photograph	8.2x10.8

Glass Negatives - Box 761 to 945	RUBB/861	c.1920	861 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/862	c.1920	862 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/863	c.1920	863 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/864	c.1920	864 Portrait. (Bachrach. Proof for publication). Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/865	c.1920	865 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/866	c.1920	866 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/867	c.1920	867 Portrait. C.T. Mabey, Esq. Vice-President, 1933- 1934. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/868	c.1920	868 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/869	c.1920	869 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/870	c.1920	870 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/871	c.1920	871 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/872	c.1920	872 Portrait. Close up photograph	8.2x10.8

Glass Negatives - Box 761 to 945	RUBB/873	c.1920	873 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/874	c.1920	874 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/875	c.1920	875 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/876	c.1920	876 Portrait. 31 Kingly St., London W1. Portrait by "Rotrogravure". Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/877	c.1920	877 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/878	c.1920	878 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/879	c.1920	879 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/880	c.1920	880 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/881	c.1920	881 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/882	c.1920	882 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/883	c.1920	883 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/884	c.1920	884 Portrait. Close up photograph	8.2x10.8

Glass Negatives - Box 761 to 945	RUBB/885	c.1920	885 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/886	c.1920	886 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/887	c.1920	887 Photomicrograph. (layers presenting different textures).	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/888	c.1920	888 Old town photograph (in the forest). Mid -shot photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/889	c.1920	889 Curved tree in the jungle. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/890	c.1920	890 Rubber processing plant (showing tanks). Mid -shot photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/891	c.1920	891 Tree plantation showing rubber tree height (young trees) (worker by side of tree). Mid -shot photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/892	c.1920	892 Storage shed. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/893	c.1920	893 Rubber plantation. (Terracing). Mid -shot photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/894	c.1920	894 The jungle. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/895	c.1920	895 Nurseries (with seedlings). Mid -shot photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/896	c.1920	896 Interior of shed. Mid - shot photograph	8.2x10.8

Glass Negatives - Box 761 to 945	RUBB/897	c.1920	897 Rubber factory (exterior). Mid -shot photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/898	c.1920	898 Mature rubber trees on flat land. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/899	c.1920	899 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/900	c.1920	900 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/901	c.1920	901 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/902	c.1920	902 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/903	c.1920	903 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/904	c.1920	904 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/905	c.1920	905 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/906	c.1920	906 Portrait. Military. (Sun Studio K.L.) Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/907	c.1920	907 Portrait. Close up photograph,	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/908	c.1920	908 Portrait. (signed). Close up photograph	8.2x10.8

Glass Negatives - Box 761 to 945	RUBB/909	c.1920	909 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/910	c.1920	910 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/911	c.1920	911 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/912	c.1920	912 Portrait. (Valentine).Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/913	c.1920	913 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/914	c.1920	914 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/915	c.1920	915 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/916	c.1920	916 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/917	c.1920	917 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/918	c.1920	918 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/919	c.1920	919 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/920	c.1920	920 Portrait. Close up photograph	8.2x10.8

Glass Negatives - Box 761 to 945	RUBB/921	c.1920	921 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/922	c.1920	922 Portrait. (signed). Braulaud. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/923	c.1920	923 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/924	c.1920	924 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/925	c.1920	925 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/926	c.1920	926 Portrait. Foreign military (ceremonial). Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/927	c.1920	927 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/928	c.1920	928 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/929	c.1920	929 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/930	c.1920	930 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/931	c.1920	931 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/932	c.1920	932 Portrait. Close up photograph	8.2x10.8

Glass Negatives - Box 761 to 945	RUBB/933	c.1920	933 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/934	c.1920	934 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/935	c.1920	935 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/936	c.1920	936 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/937	c.1920	937 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/938	c.1920	938 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/939	c.1920	939 Portrait. (signed). Walton Clements, Reading. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/940	c.1920	940 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/941	c.1920	941 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/942	c.1920	942 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/943	c.1920	943 Portrait. (Blank & Stoller photo). Close up photograph	8.2x10.8
Glass Negatives - Box 761 to 945	RUBB/944	c.1920	944 Portrait. (signed on side of jacket). Close up photograph	8.2x10.8

Glass Negatives - Box 761 to 945	RUBB/945	c.1920	945 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/946	c.1920	946 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/947	c.1920	947 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/948	c.1920	948 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/949	c.1920	949 Portrait. Mayer (Wien Vis-a-Vis der Oper). Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/950	c.1920	950 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/951	c.1920	951 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/952	c.1920	952 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/953	c.1920	953 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/954	c.1920	954 Portrait. (4 R.P.des Champs Elysees. Portraits G.L.Manuel freres). Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/955	c.1920	955 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/956	c.1920	956 Portrait. Close up photograph	8.2x10.8

Glass Negatives - Box 946 to 1155	RUBB/957	c.1920	957 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/958	c.1920	958 Portrait. (signed). Cooke. Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/959	c.1920	959 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/960	c.1920	960 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/961	c.1920	961 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/962	c.1920	962 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/963	c.1920	963 Portrait. (female). Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/964	c.1920	964 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/965	c.1920	965 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/966	c.1920	966 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/967	c.1920	967 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/968	c.1920	968 Graph. Effect of speed on tyre wear. Milimeters per 100 miles against miles per hour.	8.2x10.8

Glass Negatives - Box 946 to 1155	RUBB/969	c.1920	969 Graph. Coefficient of friction against journal speed-R.P.M. (Plain rubber bush, Bronze bush).	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/970	c.1920	970 Diagram. Rubber mountings. (A) In compression, (B) in shear.	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/971	c.1920	971 Diagram. Cross section of fluted rubber bearing.	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/972	c.1920	972 Graph. Rubber stress-strain curves. (1. Rubber-sulphur, 2. Do+ Accelerator, 3. Tyre tread, 4. Soling). Elongation % against L.b. per sq. inch.	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/973	c.1920	973 Rubber processing plant (interior). Hollings & Guests, Birmingham. (S.H. Fry, 5, Highbury Grove, London N5) Mid-shot photograph	8.2x8.2
Glass Negatives - Box 946 to 1155	RUBB/974	c.1920	973 Tanks. Rubber processing plant. Mid-shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/975	c.1920	975 James Lyne Hancock Ltd. (On this site the rubber industry was created and founded by Thomas Hancock in 1820. Rubber manufacturer. James Lyne Hancock the oldest vulcanised rubber works in the world). Mid-shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/976	c.1920	976 Rubber equipment. Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/981	c.1920	981 Graph. Elongation % against stress, lb/sq.in. (1. China clay, 2. Wood flour, 3. Wood wool, 4. Cotton linterns).	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/982	c.1920	982 Diagram. (2 items).	8.2x10.8

Glass Negatives - Box 946 to 1155	RUBB/983	c.1920	983 Table 1. (Property: Tensile strength, Elongation, Modulus at 300% E, hardness; Peat Black, Soft Black, Reinforcing Black).	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/984	c.1920	984 Comparison of Extenders I. (Reclaim Mixing). Mixing contains: Rubber, 25; W.T. Reclaim, 75; Extender, 25; Whiting, 120.	8.2x12
Glass Negatives - Box 946 to 1155	RUBB/986	c.1920	986 Comparison of Extenders I. (cont.) (Reclaim Mixing). Extender and Modulus (lb/sq.in) at 300% Elongation.	8.2x8.2
Glass Negatives - Box 946 to 1155	RUBB/987	c.1920	987 Comparison of Extenders I. (cont.) (Reclaim Mixing). (B.S. Hardness No.0- 80)	7.5x8.2
Glass Negatives - Box 946 to 1155	RUBB/988	c.1920	988 Comparison of Extenders II. (Rubber Mixing). Extenders and Tensile strength (lb/sq.in). (Full lines). B.S. Hardness No. (Hatched lines). Mixing contained: Rubber, 75; Extender, 25; Whiting, 150; etc.	6.5x8.2
Glass Negatives - Box 946 to 1155	RUBB/990	c.1920	990 Variation of Extender Concentration HIBAD No.3 in a cheap mechanical mixing. (China clay 70; Whiting, 75). Property Tensile strength, Elongation at break, Modulus at 300% elongation and Hardness) and Parts of Extender (lb/sq.in.).	6.5x8.2
Glass Negatives - Box 946 to 1155	RUBB/991	c.1920	991 Perbunan (Stanco) with Extenders in a tyre-tread mixing (13 parts of extenders). Property (Tensile strength, Elongation at break, Modulus at 300% elongation and Hardness) and Extender (lb/sq.in.).	7.3x8.2

Glass Negatives - Box 946 to 1155	RUBB/999	c.1920	999 Map. United States key of plants.	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1000	c.1920	1000 Graph. Thousands of tons against months. Requirements. (New Supply curve: Production + Import). Stocks graph (curve: Minimum Working Inventory).	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1002	c.1920	1002 Rubber plantation. Worker on ground. Mid -shot photograph	8.2x8.2
Glass Negatives - Box 946 to 1155	RUBB/1003	c.1920	1003 Rubber conservatory (growing plants). Close up photograph	8.2x8.2
Glass Negatives - Box 946 to 1155	RUBB/1005	c.1920	1005 Rubber estates. Photographs A and B. A: Station 2, Quadrats 5 and 6; foot-slope of Sierra Zuluaga. B: Station 3, Quadrat 1; near Cedros. A good stand of mature plants.	8.2x10.5
Glass Negatives - Box 946 to 1155	RUBB/1006	c.1920	1006 Caopas specimen. An exceptionally tall (130 cm) individual. Weight: 9.4 lbs. (Scale: 0-30 cm).	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1007	c.1920	1007 Fig.11. The carbide plant at Schkopau. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1008	c.1920	1008 Fig.15. Fractioning Tower with re-boiler. Mid - shot photograph	8.0x10.6
Glass Negatives - Box 946 to 1155	RUBB/1009	c.1920	1009 Fig.17. A modern cracking unit. Mid -shot photograph	8.0x10.6
Glass Negatives - Box 946 to 1155	RUBB/1010	c.1920	1010 Fig.18. Pilot Plant converting Butane into Butadiene. Mid -shot photograph	8.0x10.6
Glass Negatives - Box 946 to 1155	RUBB/1011	c.1920	1011 Fig.30. Part of the Buna Plant at Schkopau. Mid -shot photograph	8.0x10.6

Glass Negatives - Box 946 to 1155	RUBB/1013	c.1920	1013 Work of selection and isolation. Spence field planted with different varieties, whose range in rubber runs from 8 to 20% of the dry weight of the plants (top picture). Arguella field comprising 100 acres of guayule, planted in 1930 in check rows and photographed August 9, 1941 (bottom picture)	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1014	c.1920	1014 New synthetic rubber plant operated by Firestone. Exterior view of one portion of the new synthetic rubber plant. This plant built and operated by Firestone was the first Defence Plant Corporation factory in the United States to produce synthetic rubber. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1015	c.1920	1015 Page twenty-three. Graph of speed and its relation to the rate of tyre wear (Wear in mm/1000 miles against speed (m.p.h.) and photomicrograph (The effect of speed: the tyre on the left driven at an average speed of 80 m.p.h. has run only one-tenth of the mileage of the other tyre used at normal touring speeds.	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1019	c.1920	1019 Film negative. Workers in the fields. Mid -shot photograph	7.4x10.4
Glass Negatives - Box 946 to 1155	RUBB/1020	c.1920	1020 Film negative. Workers building the "Shada" for rubber storage. Mid -shot photograph	7.4x10.4
Glass Negatives - Box 946 to 1155	RUBB/1021	c.1920	1021 Film negative. Draining and holing. Mid -shot photograph	7.2x10.4

Glass Negatives - Box 946 to 1155	RUBB/1022	c.1920	1022 Film negative. Nurseries (young rubber plants). Mid -shot photograph	7.4x10.4
Glass Negatives - Box 946 to 1155	RUBB/1023	c.1920	1023 Commerce Weekly (United States of America Department of Commerce) September 19, 1942; Vol. VIII, No.12. Using old rails instead of new tyres.	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1025	c.1920	1025 The Sphere. Pictures from the West African Battle Zones. Rubber being passed through a hand-operated rolling machine which converts it into a thin sheet bearing a ribbed pattern. The dense forests of Ashanti, in the Gold Coast, have become an important factor in the effort to replace rubber supplies lost to the Allied Nations when the Japanese captured Malaya and the Dutch East Indies. While all the resources of science are being harnessed to this task in British and American factories, Africans tappers using their traditional primitive methods are making a valuable contribution. Wild rubber trees are scattered over an area of about 12000 square miles in Ashanti. There are seldom more than three to four trees to the acre, and the tappers have to hack their way through thick undergrowth to reach the creeper-festooned trees.	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1026	c.1920	1026 Graph. Effect of tyre tread crumb on tensile strength. (Tensile strength lbs/in ² against Volume per cent of new rubber in mix).	8.2x10.8

Glass Negatives - Box 946 to 1155	RUBB/1027	c.1920	1027 Graph. Effects of various diluents on tensile strength. (Tread crumb, Reclaim, Hibad extender). Tensile strength in lbs/in ² against Volume % of new rubber in mix.	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1028	c.1920	1028 Bar chart. Effect of tyre tread crumb (100 parts per 100 parts original rubber hydrocarbon) on B.S. hardness number. (With and without crumb) (B.S. Hardness number and Hardness of crumb stock).	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1029	c.1920	1029 Bar chart. Effect of extra sulphur and accelerator on hardness of crumb mixings. (tread mix - new rubber-, tread mix -plus vibad extender-, reclaim mix) (With and without crumb and B.S. Hardness number relative)	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1030	c.1920	1030 Table. Tyre tread mixes (Based on 100 parts of new rubber). Accelerator: Optimum cure, Tensile strength, Breaking elongation per cent, Modulus at 300% elongation, Permanent set per cent, B.S. Hardness number and tear strength	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1031	c.1920	1031 Photomicrograph. (3 slides). 1) Zinc Oxide (50), French Chalk (45) and Crumb; 2) Zinc Oxide (60) and Crumb; 3) Pure Gum and Crumb.	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1032	c.1920	1032 Table. Properties of mixes made from tyre tread crumb without new rubber or reclaim. (Tensile strength; Breaking elongation %; Modulus at 300% elongation; B.S. Hardness number; Permanent set after 200% elongation; Tear strength; Abrasion loss; 15o angle)	8.2x10.8

Glass Negatives - Box 946 to 1155	RUBB/1033	c.1920	1033 Bottom view of reactors. (On this and the following page is shown a group of additional photographs of unusual views of the synthetic rubber operation of the Standard Oil Co. of Louisiana at Baton Rouge, La. Story of the part that the Standard Oil Co. of Louisiana is playing in the synthetic rubber program appears on pages 949 to 959 under the title "Molecular Magic at Baton Rouge", written by Associate Editor F.J. Van Antwerpen, following a two-day inspection trip). Mid - shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1034	c.1920	1034 Rubber processing plant. View of recovery area. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1035	c.1920	1035 Fig.20. (top) Pumps for Moving Butadiene and Styrene to reactors. Flow diagram of GR-S Rubber production (Standard Design) (bottom). Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1036	c.1920	1036 Rubber processing plant. Fig.25. Reactors in which polymerization takes place. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1037	c.1920	1037 Fig.28. Concrete blending tanks for GR-S Latex. (Rubber processing plant.) Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1038	c.1920	1038 Fig.31. View of the driers, which will evaporate 160 tons of water a day. (Rubber processing plant). Mid shot photograph	8.2x10.8

Glass Negatives - Box 946 to 1155	RUBB/1039	c.1920	1039 Cartoon. (1 and 2). Disney's Donald Duck explaining about synthetic rubber. ("I'll show you how to make synthetic rubber"). Butadiene: Okay - we are off! One form of synthetic (or, better, substitute) rubber starts with all as it comes from the earth. "Cracking" oil (1) gives gasoline. grease, many other things. One of these is butadiene (2) - pronounced bu-ta-dy'ene- a very complex gas composed of hydrogen and carbon.	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1040	c.1920	1040 Cartoon. (3 and 4). Disney's Donald Duck. Styrene: Leaving butadiene a moment, consider coal. "Coal" can also be made to yield a huge array of different substances (3)- raw materials of tomorrow's chemistry. One is styrene (4), a liquid and, like butadiene a hydrocarbon- but of different molecular structure. That all clear?	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1041	c.1920	1041 Cartoon. (5 and 6). Disney's Donald Duck. Now we bring butadiene and styrene together -three quarters of the first, one quarter of the second- in a solution of soapy water (5). They combine to form a basic latex, similar to that of natural rubber. This is just about as simple as adding sugar and egg to milk (6) to make custard.	8.2X10.8
Glass Negatives - Box 946 to 1155	RUBB/1042	c.1920	1042 Cartoon. (7 and 8). Disney's Donald Duck. After the latex has "cooked" awhile, the chemical action is halted and an antioxidant is added as a preservative (7). This is the last step in blending latex	8.2x10.8

			synthetically - just as adding flavouring (8) in the last step in mixing that custard we spoke of. Getting hungry?	
Glass Negatives - Box 946 to 1155	RUBB/1043	c.1920	1043 Cartoon. (9 and 10). Disney's Donald Duck. But the latex is still liquid. Before it can be used, it must be coagulated or curdled-broken up into rubber particles. This is done with salt and sulphuric acid (9). Custard curdels, too, if you leave to long over the fire (10). You don't believe me? Ask any bride!	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1044	c.1920	1044 Cartoon. (11 and 12). Disney's Donald Duck. The curdled latex next has is water and moisture removed. As it is passed over a vacuum-which sucks the water out- rollers, help the job along with pressure. Result: damp, rubbery particles (11). Remember how Mother used to squeeze the liquid from cottage cheese (12)?	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1045	c.1920	1045 Cartoon. (13 and 14). Disney's Donald Duck. Semifinal step: the rubber particles are put through a drier and given a nice, even toasting at 215 degrees Fahrenheit (13). This removes the last bit of moisture from the liquid latex. You could compare the procedure to roasting peanuts (14). Mmm- care to have a bag with me?	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1046	c.1920	1046 Cartoon. (15 and 16). Disney's Donald Duck. The little chunks of rubber are now baled (15), ready to ship to the manufacturer. If the manufacturer prefers, we	8.2x10.8

			can squeeze the rubber into sheets first (16). That's how it often comes -sorry, used to come- from Malayan and East Indian rubber plantations.	
Glass Negatives - Box 946 to 1155	RUBB/1047	c.1920	1047 Rubber processing tower. 20 000 gallons per minute is the rate at which process water is cooled from 100 to 80 o.F. Andrew C. Smey is inspecting the fins on the side of the tower at Institute. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1048	c.1920	1048 Rubber processing tower. Top of the cooling tower at Institute is equipped with nine propeller type fans that circulate 1 500 000 cubic feet of air per minute to cool process water, used in making GR-S. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1049	c.1920	1049 BLE arrives from Naugatuck, an antioxidant used as a preservative in GR-S at Institute. Naugatuck Chemical Division is credited with important improvements in GR-S. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1050	c.1920	1050 The alcohol now comes from corn. It takes about one and three quarters bushels of corn to make rubber for one automobile tyre; and 27 700 000 bushels a year. Pumps move raw materials; butadiene, styrene and other chemicals for storage to reactor areas at Institute as C.E.Lucas checks over its many controls. Mid -shot photograph	8.2x10.8

Glass Negatives - Box 946 to 1155	RUBB/1051	c.1920	1051 Seventy-two reactors like these are provided at Institute for polymerization of butadiene and styrene. Reactors used at Institute consume hardly one per cent of our normal corn crop. But the chemists don't care what they make it from -molasses, potatoes, sugar, wood, coal tar, natural gas or petroleum. Any or all of these come from Pearl Harbour, and Washington ordered the project doubled. Then, as realization of the emergency grew, it was doubled again - and again. Each change meant starting a new set of plans. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1052	c.1920	1052 George Graham turns the valve that starts the flow of butadiene, first stage of synthetic rubber manufacture in his plant, on March 31st. (top). Blow-down tanks at Institute- intermediate stage between polymerization and blending- give idea of the size of installations. (central picture) Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1053	c.1920	1053 Butadiene, styrene, and many special chemicals are moved by pumps and pipe lines from storage room to reactor area at Institute plant. (United States Rubber Co.). Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1054	c.1920	1054 Huge compressor batteries of this type are being installed by Clark, in many leading plants for the manufacture of both Buna and Butyl types of synthetic rubber. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1055	c.1920	1055 Large Midwestern tank farms. Mid -shot photograph	8.2x10.8

Glass Negatives - Box 946 to 1155	RUBB/1056	c.1920	1056 (Reactors as shown). The synthetic latex is coagulated in these large tanks. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1057	c.1920	1057 Storage. The gas butadiene - brief constituent of Buna synthetic rubber- is stored as a liquid under pressure in great spherical tanks at a synthetic plant built and operated for the government by United States Rubber Company. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1059	c.1920	1059 (April, 15) Largest Synthetic Rubber Plant. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1060	c.1920	1060 (April, 1944). Industrial and Engineering Chemistry. Union Carbide Reports: first full-year's production of Butadiene for the Government's Synthetic Rubber Programme (Institute, W.Va. Plant). Night view of the immense butadiene plant at the Institute, W.Va.. A little over a year ago the first tank car of butadiene was shipped from the Government's large integrated rubber project at Institute W. Va. Now huge butadiene producer -although originally designed to produce 80 000 tons annual capacity, the Institute plant is now delivering butadiene at a rate of more than 100 000. Mid shot photograph.	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1061	c.1920	1061 (Carbide and Carbon Chemicals Corporation Photograph). Butadiene, made from grain alcohol, is produced in this section of a government synthetic- rubber plant in West Virginia. Mid -shot	8.2x10.8

			photograph	
Glass Negatives - Box 946 to 1155	RUBB/1062	c.1920	1062 (Illustrated, 1944, March 18). Test Tube Rubber. Butadiene, chief ingredient of synthetic rubber will be made in giant towers at Port Neches, Texas. The Japanese hold the bulk of the world's rubber. How chemists have produced a superior substitute is told by Carl Olsson. When the Japs struck at Pearl Harbour and overran the Far East they also struck what might well have been a mortal blow against the United Nations' capacity to wage modern mechanized war. The United States, with large quantities of the basic raw materials, alcohol or petroleum, near at hand, got busy early on the problem. Within a month of Pearl Harbour plans had been drawn up for the production of synthetic rubber and the goal was set at 800 000 tons. The entire rubber consumption in the whole country in the year before Pearl Harbour was only about 600 000 tons. The bottleneck of synthetic rubber production is a substance called butadiene. In 1942 the best existing methods of extraction then known yielded only two per cent of this substance. Mid-shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1063	c.1920	1063 (4/44). Dotting the site of one of the world's largest butadiene plants are forty-two huge spherical pressure tanks, some with a capacity of 12 000 barrels.	8.2x10.8

			Mid -shot photograph	
Glass Negatives - Box 946 to 1155	RUBB/1064	c.1920	1064 The Chemical News Parade. This is one of three fluid catalytic cracking plants Standard Oil of New Jersey has erected for the refining of petroleum and the production of aviation gasoline to meet the steadily growing demand. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1065	c.1920	1065 This close up shows one of the meters in the control room of the cracking plant. These operators can tell immediately from a glance at the dial just how much catalyst is being fed into the plant and by the mere turning of a knob can increase or decrease this flow. (top). This maze of pipes contains gas oil or reduced crude which is heated before it enters the catalytic cracker in a vaporized state to be broken down into its hydrocarbon components. (bottom). Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1067	c.1920	1067 Catalytic Cracking Plant under construction by Socony-Vacuum Oil Company, Inc. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1068	c.1920	1068 The Research Association of British Rubber Manufacturers. Industrial and Engineering Chemistry. Industrial Edition. Consecutive No.13. Mid -shot photograph	8.2x10.8

Glass Negatives - Box 946 to 1155	RUBB/1069	c.1920	1069 This is part of an integrated plant built and operated for the Rubber Reserve Company by Carbide and Carbon Chemicals Corporation and United States Rubber Company. The piping in the foreground is supported on steel salvaged from the Brooklyn elevated street railway; approximately 300 tons of steel were obtained for this purpose. Some 400 miles of piping are used in the construction of the process units. (The photograph on the Contents Page (see page 3 of the advertising section) of this issue shows one the butadiene units). Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1070	c.1920	1070 (Volume 22, March 10). Canals has to be dredged to siphon the water from marshes and the muck cleared from the ditches with draglines before construction of the plant for the Neches Butane Products Co. could be started. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1071	c.1920	1071 Timber and material for the first buildings could not be brought to the property because of mud and the lack of roads, so it was dumped into a drainage canal and floated 1 mile to the building site. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1072	c.1920	1072 Dredges cut huge canals as shown above to transport the cooling water from the Neches River to the plant, and then it is carried back again through the outfall canal after the water has served its purpose. Mid shot photograph	8.2x10.8

Glass Negatives - Box 946 to 1155	RUBB/1073	c.1920	1073 Hundred of pumps are to be used for pumping the cooling water. Water is obtained at the river pumping station. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1074	c.1920	1074 A general view of the plant layout at the Trenton Valley Distillers Corp., Trenton, Mich. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1076	c.1920	1076 Chemical and Engineering News. Synthetic Rubber Production. Equal in capacity to more than 200 000 acres of rubber trees, this government owned plant operated by the Firestone Tire & Rubber Co., was the first unit in the government's synthetic rubber program to begin production. The completion of two other synthetic rubber plants by Firestone in the South will make the company's total capacity equal to that of a million acres of rubber trees. Tires and the other hundreds of rubber products made by Firestone with synthetic rubber have stood up well under the severest possible battle conditions. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1077	c.1920	1077 Technical drawing, (Technical employees in our plants to perform the duties of those who had been transferred).	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1078	c.1920	1078 Canadian Government Opens Sarnia Rubber Plant (by F.J.Van Antwerpen, Associate Editor). Close up photograph	8.2x10.8

Glass Negatives - Box 946 to 1155	RUBB/1079	c.1920	1079 One of the heat exchangers of the extraction section of the butadiene unit, where the rated capacity is 30 000 tons a year, from which 34 000 tons of Buna S rubber are made. (Right: Styrene is purified in this building. Production of styrene has begun just eleven months after the first sod was turned). Mid - shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1080	c.1920	1080 One of four ethyl benzene units at Texas plant. Alkylation takes place to form ethyl benzene and in addition diethyl benzene and polyethyl benzenes. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1081	c.1920	1081 The dehydrogenation of ethyl benzene is carried out using furnaces pictured. A catalyst case can be seen inside the building. Mid - shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1082	c.1920	1082 Styrene finishing unit. The proper combination of high-vacuum technique plus suitable inhibitors has made a routine operation out of a difficult problem. Mid shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1083	c.1920	1083 Diagram. (Pressure relief valve and Combined liquid level, gauge and sampling and temperature lock). Annual operating costs. The annual operating costs consist of: (1) investment charges; (2) taxes; (3) maintenance and repair; (4) supplies and miscellaneous, and (5) power, light and fuel. The investment charges for the corkboard, used on the single-wall containers, are based upon a ten year life, no salvage value, 4 per cent	8.2x10.8

			sinking fund interest, and 4 per cent bond interest, for a combined figure of 6.7 per cent of the initial cost of the insulation. The investment charges for the refrigeration plant are based upon a 20 year life, 10 per cent salvage value, 4 per cent sinking fund interest and 4 per cent bond interest, for a combined figure of 7 per cent initial cost of the refrigeration plant.	
Glass Negatives - Box 946 to 1155	RUBB/1084	c.1920	1084 Diagram. Rubber plant.	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1085	c.1920	1085 General view of rubber plant. Mid-shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1086	c.1920	1086 The Institute Plant. Sketch showing the butadiene and styrene production facilities, and plant utilities, at Institute., Va. The flow of materials in each of the four butadiene and two styrene units is towards the upper right of the page. Raw materials are received by river barge and railroad; most of the finished chemical products are sent to the United States Rubber Company-operated polymerization plant (not shown) beyond the parking area. (Key to Institute Plant: 1 to 28)	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1087	c.1920	1087 Rubber plant. General view. Mid-shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1089	c.1920	1089 Pumps for moving butadiene and styrene to reactors. Mid-shot photograph	8.2x10.8

Glass Negatives - Box 946 to 1155	RUBB/1090	c.1920	1090 Reactors in which polymerization takes place. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1091	c.1920	1091 Concrete blending tanks for GR-S latex. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1092	c.1920	1092 A pair of butadiene units and a dowtherm heat unit. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1093	c.1920	1093 Safety tower for burning of waste gases. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1094	c.1920	1094 Two of the five alcohol storage tanks. Mid -shot photograph	8.2x11.8
Glass Negatives - Box 946 to 1155	RUBB/1095	c.1920	1095 Meter and control room for one of the butadiene units. Mid-shot photograph	8.2x11.8
Glass Negatives - Box 946 to 1155	RUBB/1096	c.1920	1096 Tanks for preparation of soap and other solutions used. Mid- shot photograph	8.2x11.8
Glass Negatives - Box 946 to 1155	RUBB/1097	c.1920	1097 View of the driers which will evaporate 160 tons of water a day. Mid - shot photograph	8.2x11.8
Glass Negatives - Box 946 to 1155	RUBB/1098	c.1920	1098 Table. U.S. Government Rubber Programme for Synthetic Rubber Plant. Position at the completion of plant erection. June, 1944. (Product; Rated annual capacity, tons; Expected annual capacity, % rated; Investment cost, %; Total production to June 1944, tons).	8.2x11.8
Glass Negatives - Box 946 to 1155	RUBB/1099	c.1920	1099 Table. U.S. Government Synthetic Rubber Plant. (Date of first production, Butadiene, Styrene, GR-S).	8.2x11.8
Glass Negatives - Box 946	RUBB/1100	c.1920	1100 Graph. (2) Degree of cracking against percentage strain.	8.2x11.8

to 1155				
Glass Negatives - Box 946 to 1155	RUBB/1101	c.1920	1101 Photomicrograph.	8.2x.8.2
Glass Negatives - Box 946 to 1155	RUBB/1102	c.1920	1102 Photomicrograph. (Cross section marked with A, D, F, and E).	8.2x.8.2
Glass Negatives - Box 946 to 1155	RUBB/1103	c.1920	1103 Photomicrograph. (Cross section marked with A, B, C, D, E, and F)	8.2x.8.2
Glass Negatives - Box 946 to 1155	RUBB/1104	c.1920	1104 Photomicrograph. Cross sections. (A, D, E, and F and A,C,D,E, and F)	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1105	c.1920	1105 Rescue boat in river. Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1106	c.1920	1106 Float. Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1107	c.1920	1107 Set of three floats in rubber plant. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1108	c.1920	1108 Canoe, lake lifeguard boat. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1109	c.1920	1109 Inflatable boat. Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1110	c.1920	1110 Rescue paddleboard. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1111	c.1920	1111 Lifeguard inflatable boat. Close up photograph	8.2x10.8

Glass Negatives - Box 946 to 1155	RUBB/1112	c.1920	1112 Portable rescue boat. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1113	c.1920	1113 Safety rescue portable boat. Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1114	c.1920	1114 Avionette (seaplane). Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1115	c.1920	1115 Seaplane 15 (K4230). Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1116	c.1920	1116 Design diagram (avionette). "Y" Dinghy seaplane with dinghy towed on top. Made by The Red Company, 17 Stoke Rd, Guilford, Surrey. (Showing hydrostatic switch and stowage for dinghy).	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1117	c.1920	1117 Displaying open dinghy. Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1118	c.1920	1118 Balance diagram. Chemical bonds. Styrene from ethylbenzene. (AlCl ₃ ; Fe Steam 800-900 oC)	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1119	c.1920	1119 Sources of butadiene (with chemical equation). (1) Cracked petroleum gas and natural gas; (2) 2- Butene; (3) n-Butane; (4) Alcohol.	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1120	c.1920	1120 Formation of a butadiene-styrene co-polymer link. Chemical equation and bonds (Catalyst, Emulsifier, Modifiers, Water).	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1121	c.1920	1121 Branched Chain GR-S. Chemical equation.	8.2x10.8
Glass Negatives - Box 946	RUBB/1122	c.1920	1122 (Film). Photograph of Directors during construction in rubber	6.0x8.7

to 1155			plant. Mid -shot photograph	
Glass Negatives - Box 946 to 1155	RUBB/1123	c.1920	1123 (Film). Elliott-Fisher Continental Cinema. Directors of Rubber plant in front of car. Mid -shot photograph	6.0x8.7
Glass Negatives - Box 946 to 1155	RUBB/1124	c.1920	1124 (Film). Rubber processing tanks. Mid -shot photograph	6.0x8.7
Glass Negatives - Box 946 to 1155	RUBB/1125	c.1920	1125 (Film). Rubber processing tanks. Close up photograph	6.0x8.7
Glass Negatives - Box 946 to 1155	RUBB/1126	c.1920	1126 (Film). Rubber plant. Mid -shot photograph	6.0x8.7
Glass Negatives - Box 946 to 1155	RUBB/1128	c.1920	1128 People in the streets with rubber gas masks. Mid - shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1129	c.1920	1129 Rubber plant workers wearing special uniforms. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1131	c.1920	1131 Rubber uniforms and masks. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1132	c.1920	1132 Rubber pipes laying in the streets. Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1133	c.1920	1133 Portrait. (Harris & Ewin). President (Rubber Company). Close up photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1134	c.1920	1134 Petrol turbines. Mid - shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1136	c.1920	1136 Portrait. (Chemical Industries, 1940). Close up photograph	8.2x10.8

Glass Negatives - Box 946 to 1155	RUBB/1138	c.1920	1138 Another view of rubber plant. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1139	c.1920	1139 Four big units for producing butadiene from alcohol near Pittsburgh, Penna. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1140	c.1920	1140 Graph. Resilience against parts (per 100 R.H.C.) of carbon black. German carbon blacks and resilience. Black loading curves.	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1141	c.1920	1141 Graph. Various resins in GR-S cements. Thickness (ins x 10 ⁻⁴) against load (lb/in).	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1142	c.1920	1142 Graph. Effect of kerosene on bond strength of GR-S cements. Thickness (ins x 10 ⁻⁴) against load (lb/in).	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1143	c.1920	1143 Graph. Isocyanates in GR-S cements. Thickness against load to strip.	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1144	c.1920	1144 Graph. Isocyanates in GR-S cements. Weeks after mixing against gelling tendency,	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1145	c.1920	1145 Graph. Curve. Def() Hardness against Proportion of Renacit.	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1146	c.1920	1146 Graph. Abrasion loss against load. Natural rubber and buna curves.	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1147	c.1920	1147 Diagram. Electric motor and rubber sample. (1.axis fixed; 2. and 3. supported by free swinging arms).	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1148	c.1920	1148 Diagram. Pivot, lever and scale. (Constant temperature jacket and cylindrical rubber sample).	8.2x10.8
Glass Negatives - Box 946	RUBB/1149	c.1920	1149 Graph. Steam and air against time of reclaiming (mins).	8.2x10.8

to 1155				
Glass Negatives - Box 946 to 1155	RUBB/1150	c.1920	1150 Graph. Buna curves. Centigrade after 2000 revs. against load.	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1151	c.1920	1151 Diagram. Drive from motor parts.	8.2x10.8
Glass Negatives - Box 946 to 1155	RUBB/1155	c.1920	1155 Rubber processing plant machinery. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1156	c.1920	1156 Rubber plant workers in laboratory. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1157	c.1920	1157 Motor testing on desk. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1158	c.1920	1158 Testing equipment. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1159	c.1920	1159 Woman working on microscope samples. Close up photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1160	c.1920	1160 Battery. Close up photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1161	c.1920	1161 Laboratory machinery. Close up photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1162	c.1920	1162 Machines for rubber processing. Close up photograph	8.2x10.8

Glass Negatives - Box 1156 to 1480	RUBB/1163	c.1920	1163 Microscope. (Gessellschaft fur Feinmechanik, m.b.H.; Manheim). Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1164	c.1920	1164 Rubber plant, general interior view. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1165	c.1920	1165 Rubber plant, machines close up. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1166	c.1920	1166 Diagram. Rubber processing.	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1167	c.1920	1167 Rubber plant, general building view with stacks. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1168	c.1920	1168 Rubber plant, general view in storage room. Mid - shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1169	c.1920	1169 Rubber plant, general view; exterior towers. Mid - shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1170	c.1920	1170 Rubber plant, general view, exterior; store huts. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1171	c.1920	1171 Rubber plant, general exterior view. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1172	c.1920	1172 Rubber plant, general store room with ladder to slide down the materials. Misd -shot photograph	8.2x10.8

Glass Negatives - Box 1156 to 1480	RUBB/1173	c.1920	1173 Film. Rubber plant works and exterior. Mid - shot photograph	6.0x7.0
Glass Negatives - Box 1156 to 1480	RUBB/1174	c.1920	1174 Film. Rubber plant works and exterior. Mid - shot photograph	6.0x7.0
Glass Negatives - Box 1156 to 1480	RUBB/1175	c.1920	1175 Film. Rubber plant works and exterior. Mid - shot photograph	6.0x7.0
Glass Negatives - Box 1156 to 1480	RUBB/1176	c.1920	1176 Film. Rubber plant works and exterior. Mid - shot photograph	6.0x7.0
Glass Negatives - Box 1156 to 1480	RUBB/1177	c.1920	1177 Film. Rubber plant works and exterior. Mid - shot photograph	6.0x7.0
Glass Negatives - Box 1156 to 1480	RUBB/1178	c.1920	1178 Film. Rubber plant works and exterior. Mid - shot photograph	6.0x7.0
Glass Negatives - Box 1156 to 1480	RUBB/1179	c.1920	1179 Film. Rubber plant works and exterior. Mid - shot photograph	6.0x7.0
Glass Negatives - Box 1156 to 1480	RUBB/1180	c.1920	1180 Film. Rubber plant works and exterior. Mid - shot photograph	6.0x7.0
Glass Negatives - Box 1156 to 1480	RUBB/1181	c.1920	1181 Film. Rubber plant works and exterior. Mid - shot photograph	6.0x7.0
Glass Negatives - Box 1156 to 1480	RUBB/1182	c.1920	1182 Fig.1 Photograph showing the general layout of the plant. As will be seen from the general layout in Fig.1 the plant has been	8.2x10.8

			erected on top on the slope of a hill so that the movement of the material is practically throughout by gravity. Mid -shot photograph	
Glass Negatives - Box 1156 to 1480	RUBB/1183	c.1920	1183 Diagram. Fig.2 Sectional elevation and plan. (top of tank, flotation discharge).	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1184	c.1920	1184 Fig.3 The Hardinge Mill for preliminary wet grinding. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1185	c.1920	1185 February 1933. Fig.4 View showing flotation cells and Dorr Thickener. Mid - shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1186	c.1920	1186 Fig. 5 The Dorr Thickener and Oliver Filters. Below is seen the Scott Drier. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1187	c.1920	1187 Industrial Chemist. Fig. 6 The Scott Drier with inspection door open. Note conveyor belt to feed hopper. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1188	c.1920	1188 Fig. 7 The Hardinge dry-grinding mill. It is carried onwards to the feed hopper placed on top of a Scott cylindrical drier, the inclined and rotating tube of which it is 35 ft. long by 5 ft. 6 in. in diameter, and rotates by means of a worm gear at 2 r.p.m. The photograph in Fig. 6 (see 1187) shows the drier with the inspection door open. The tube is heated on the outside by the gases from a coal fire at the further end of the drier. Through the centre of the tube and over the drying "black" is passed hot air which has obtained	

			its heat by passage through a series of tubes placed in the path of the hot fuel gas. Mid -shot photograph	
Glass Negatives - Box 1156 to 1480	RUBB/1189	c.1920	1189 Fig. 8 The cyclone separating plant in the dry-grinding house. For the production of Bettablack, which is superior even to Biddiblack as a rubber reinforcing agent, the method is simpler for the flotation process is dispensed with. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1190	c.1920	1190 Portrait. Close up photograph	8.2x8.2
Glass Negatives - Box 1156 to 1480	RUBB/1191	c.1920	1191 Aerial view of rubber plant. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1192	c.1920	1192 Rubber plant depot. (Carbon Company Inc.). Mid - shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1193	c.1920	1193 Aerial showing rubber plant. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1194	c.1920	1194 Aerial close up. Mid - shot photograph	8.2x10.8

Glass Negatives - Box 1156 to 1480	RUBB/1195	c.1920	1195 Rubber plant equipment. Close up photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1196	c.1920	1196 Exterior showing tanks. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1197	c.1920	1197 Exterior showing towers. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1198	c.1920	1198 Photomicrograph.	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1199	c.1920	1999 Graph. Imports from the USA of Carbon Black. Long tons against carbon black, general.	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1200	c.1920	1200 Diagram. Channel Process: lava tip, channel, burner pipe, hopper car, carbon black storage tank, elevator, burner buildings. (If there is too much air, the blanket lifts above the flames and these will burn brightly and weaver).	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1201	c.1920	1201 Flames in channel process plant. Each flame is a miniature carbon black factory. Close up photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1202	c.1920	1202 Drums in United's process for dry pelleting carbon black. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1203	c.1920	1203 Diagram. Furnace Process (Combustion). The temperature within the furnace is controlled by the air-gas ratio. (Precipitator, gas air,	8.2x10.8

			cooler, conveyor, cyclone collectors, carbon black storage tank).	
Glass Negatives - Box 1156 to 1480	RUBB/1204	c.1920	1204 Aerial view showing river. Rubber plant. Mid - shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1205	c.1920	1205 Diagram. Storage tank.	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1206	c.1920	1206 Diagram.	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1207	c.1920	1207 Table Experimental Gas Black. (From Anthracene oil E.P.C., sharp oil, tar acids, anthracene oil filtered, coalite oil, naphtalene crude; Vulc. Mins)).	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1208	c.1920	1208 Table. Experimental Gas Black. (Black and resilience % and abrasion ml/1000revs.)	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1209	c.1920	1209 Tank. Close up photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1211	c.1920	1211 Building works, rubber plant. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1212	c.1920	1212 Rubber laboratory, interior. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1213	c.1920	1213 Equipment in rubber plant, interior. Mid -shot photograph	8.2x10.8

Glass Negatives - Box 1156 to 1480	RUBB/1214	c.1920	1214 Press room for routine testing. Mill room for black stocks. First Floor, Room D. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1215	c.1920	1215 Testing room. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1216	c.1920	1216 Workers in rubber plant. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1217	c.1920	1217 Testing room. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1218	c.1920	1218 Testing room equipment. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1219	c.1920	1219 Testing meters. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1220	c.1920	1220 Pipes. Rubber plant. Close up photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1221	c.1920	1221 Workers in tanks. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1222	c.1920	1222 Laboratory, interior. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1223	c.1920	1223 Workers testing on benches. Mid -shot photograph	8.2x10.8

Glass Negatives - Box 1156 to 1480	RUBB/1224	c.1920	1224 Testing benches in rubber laboratory. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1225	c.1920	1225 Routine testing. First floor, Room Fb. Abrasion Tests. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1226	c.1920	1226 Routine testing. First floor, Room Fa. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1227	c.1920	1227 Advanced testing laboratory. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1228	c.1920	1228 Testing bench in laboratory. Close up photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1229	c.1920	1229 Testing laboratory (rubber plant). Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1230	c.1920	1230 Equipment in laboratory. Close up photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1231	c.1920	1231 Experimental instruments in laboratory. Close up photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1232	c.1920	1232 Mezzanine floor, Room 1a. Dynamic damping apparatus. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1233	c.1920	1233 Women workers testing and checking in laboratory. Close up photograph	8.2x10.8

Glass Negatives - Box 1156 to 1480	RUBB/1234	c.1920	1234 Graph. Back titration of di-isobutylamine with HCl. Cell volts against Mls N/1HCl Added.	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1238	c.1920	1238 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1239	c.1920	1239 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1240	c.1920	1240 Portrait. Close up photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1241	c.1920	1241 Storage huts. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1242	c.1920	1242 Instruments in laboratory bench. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1243	c.1920	1243 Laboratory testing. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1244	c.1920	1244 Working laboratory. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1245	c.1920	1245 Table. Some sources of lignin. (U.S. waste, tons).Represents at least 38,000,000 tons of lignin per year.	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1246	c.1920	1246 Cutting the jungle. Mid -shot photograph	8.2x10.8

Glass Negatives - Box 1156 to 1480	RUBB/1247	c.1920	1247 Aerial view of rubber plant. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1248	c.1920	1248 Table. Lignin. Some proposed formulae.	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1249	c.1920	1249 Formula. Coniferyl alcohol. Vainillin and syringaldehyde.	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1250	c.1920	1250 Braun's formula. Lignin.	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1251	c.1920	1251Photomicrograph.	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1252	c.1920	1252 Sphere close up. Close up photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1253	c.1920	1253 Table. Lignin in SKB Rubber. (Parts per 100 rubber)	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1254	c.1920	1254 Graph. Tensile strength and modulus TS; M lb/in ² against Lignin parts per weight.	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1255	c.1920	1255 Bar chart. Tensile strength, 38.5 volume loading; Lignin and other fillers in GR-S. (lb.per sq.in.)	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1256	c.1920	1256 Bar chart. Tear resistance, 38.5 volume loading; lignin and other fillers in GR-S. (lb.per.in)	8.2x10.8

Glass Negatives - Box 1156 to 1480	RUBB/1257	c.1920	1257 Bar chart. Lignin and carbon black in GR-S: Properties of vulcanisates. (Tens. Str., tear., abrasion, hardness).	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1258	c.1920	1258 Table. Air oxidation of lignin. (Lignin Unoxidised and Oxidised)	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1259	c.1920	1259 Table. Oxidised lignin in GR-S, R.R.C. standards tread.	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1260	c.1920	1260 Table. Oxidised lignin in sole stock of GR-S, Coloured with titanium oxide 25, iron oxide 10. Comparison with carbon black.	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1261	c.1920	1261 Table. Intrinsic viscosity of GR-S samples. Air-oven heated at 60 oC and 70 oC. (Hours aged at 60 oC)	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1262	c.1920	1262 Table. Cold milling breakdown of stabilised GR-S. Mooney viscosity. (Milled, mins.)	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1263	c.1920	1263 Table. Ageing of RRC standard GR-S tread. (% retention of property). The roof exposed lignin sample showed less sun-cracking, and retains better gloss.	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1264	c.1920	1264 Table. Lignin in natural rubber. (Filler; TS, tear, abrasion, resil).	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1265	c.1920	1265. View of the city. Mid-shot photograph	8.2x10.8
Glass Negatives - Box	RUBB/1268	c.1920	1268 Film. Rubber plant, tanks. Mid-shot photograph	8.2x10.8

1156 to 1480				
Glass Negatives - Box 1156 to 1480	RUBB/1269	c.1920	1269 Film. Rubber plant, interior storage tanks. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1270	c.1920	1270 Rubber plant production. Mid -shot photograph	8.7x11.8
Glass Negatives - Box 1156 to 1480	RUBB/1271	c.1920	1271 Instruments and equipment. Close up photograph	8.2x11.8
Glass Negatives - Box 1156 to 1480	RUBB/1272	c.1920	1272 Rubber plant, machinery. Close up photograph	8.2x11.8
Glass Negatives - Box 1156 to 1480	RUBB/1273	c.1920	1273 Equipment. Close up photograph	8.2x11.8
Glass Negatives - Box 1156 to 1480	RUBB/1274	c.1920	1274 Rubber tanks. Mid -shot photograph	8.2x11.8
Glass Negatives - Box 1156 to 1480	RUBB/1275	c.1920	1275 Rubber plant production line. Mid -shot photograph	8.2x11.8
Glass Negatives - Box 1156 to 1480	RUBB/1279	c.1920	1279 Tree for tapping. Mid - shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1280	c.1920	1280 Tree with disease. Close up photograph	8.2x10.8

Glass Negatives - Box 1156 to 1480	RUBB/1281	c.1920	1281 Extracting rubber in the jungle. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1282	c.1920	1282 Hut in the jungle. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1283	c.1920	1283 Drying huts in the jungle. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1284	c.1920	1284 Rubber tanks in huts in the jungle. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1285	c.1920	1285 Rubber workers in the jungle. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1286	c.1920	1286 Film. Diagram. Fig.1 Hardness gauge without foot.	7.5x9.1
Glass Negatives - Box 1156 to 1480	RUBB/1287	c.1920	1287 Film. Graph. Indentation (mm/100) against Diameter (cm).	7.5x9.1
Glass Negatives - Box 1156 to 1480	RUBB/1288	c.1920	1288 Film. Diagram. Fig.3 Errors in "Foot" test.	7.5x9.1
Glass Negatives - Box 1156 to 1480	RUBB/1289	c.1920	1289 Film. Fig.4 Bar chart. Variation between laboratories. (With and without vibration).	7.5x9.1
Glass Negatives - Box 1156 to 1480	RUBB/1290	c.1920	1290 Film. Bar chart. Fig.5 Replicate. Variation.	7.5x9.1

Glass Negatives - Box 1156 to 1480	RUBB/1291	c.1920	1291 Film. Graph. Fig.1. Tensile strength (lb/sq.in) against days scale for B and C.	7.5x9.1
Glass Negatives - Box 1156 to 1480	RUBB/1292	c.1920	1292 Film. Graph. Elongation (%) against days scale for B and C.	7.5x9.1
Glass Negatives - Box 1156 to 1480	RUBB/1293	c.1920	1293 Film. Graph. Fig.3. Modulus of 100% extension against days scale for A and C and for B.	7.5x9.1
Glass Negatives - Box 1156 to 1480	RUBB/1294	c.1920	1294 Film. Diagram. Fig.4. Gas exit and film for modulus measurement.	7.5x9.1
Glass Negatives - Box 1156 to 1480	RUBB/1295	c.1920	1295 Film. Graph. Fig.5. Stiffening (%) against Days exposure.	7.5x9.1
Glass Negatives - Box 1156 to 1480	RUBB/1296	c.1920	1296 Film. Function graph. Fig.6. Absorption (%) against wave numbers (cm-1)	7.5x9.1
Glass Negatives - Box 1156 to 1480	RUBB/1297	c.1920	1297 Film. Diagram. Fig.2. Distance between glass plates, microscope, region of focus of microscope.	8.5x9.1
Glass Negatives - Box 1156 to 1480	RUBB/1298	c.1920	1298 Film. Graph. Fig.3. Strength of bond against (lb./sq.in.) No. of projecting fibre ends.	8.5x9.1
Glass Negatives - Box 1156 to 1480	RUBB/1299	c.1920	1299 Film. Graph. Fig.4. Log 10 (lodd) against number of fibre ends recover from adhesive.	8.5x9.1
Glass Negatives - Box 1156 to 1480	RUBB/1315	c.1920	1315 Bar chart. Soling stocks. (N=neosyl MH, S=stockalite, K= kieselguhr, M= mag carbonate and D= devolite)	8.2x10.8

Glass Negatives - Box 1156 to 1480	RUBB/1316	c.1920	1316 Bar chart. Soling stocks and tensile strength, abrasion resistance and tear resistance..	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1316	c.1920	1317 Graph. Stress-strain curves for rubbers containing various amounts of neosyl MH. Elongation % against Load kg/cm ² .	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1317	c.1920	1318 Bar chart. Mixings to GD specification TG 25A quality "D". (N= 40 neosyl MH + 5 zinc oxide; Z= 125 zinc oxide)	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1319	c.1920	1319 Bar chart. Plasticity and shield value of uncured stocks.60 vols. filler per 100 vols. Rubber.	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1320	c.1920	1320 Bar chart. Cable insulation stocks. (Tensile strength and breaking elongation, BS Hardness number and Permanent set).	8.2x11.4
Glass Negatives - Box 1156 to 1480	RUBB/1321	c.1920	1321 Diagram. Tubbing stocks. Deformation of uncured stock on heating at 90 and 100 oC.	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1322	c.1920	1322 Graph. Fig.1 Relationship between stripping load and cement film. Film thickness (mils) against load (lbs.).	8.2x8.2
Glass Negatives - Box 1156 to 1480	RUBB/1323	c.1920	1323 Graph. Fig.2 Effect of temperature on bond strength of GR-S cements. Load (lb) against temperature(oC).	8.2x8.2
Glass Negatives - Box 1156 to 1480	RUBB/1324	c.1920	1324 Graph. Fig.4. Effect of stripping speed on bond strength of GR-S cements. Speed (ins /min) against load (lbs).	8.2x8.2
Glass Negatives - Box 1156 to 1480	RUBB/1325	c.1920	1325 Table. Resins in natural rubber cements.	8.2x8.2

Glass Negatives - Box 1156 to 1480	RUBB/1326	c.1920	1326 Table. GR-S cements. Effect of mastication and peptising agents.	8.2x8.2
Glass Negatives - Box 1156 to 1480	RUBB/1327	c.1920	1327 Table. GR-S cements. Various solvents.	8.2x8.2
Glass Negatives - Box 1156 to 1480	RUBB/1328	c.1920	1328 Table. Vulcanising GR-S cements.	8.2x8.2
Glass Negatives - Box 1156 to 1480	RUBB/1329	c.1920	1329 Table. Chloroprene polymer cements (Polymer, Resin, Bond Strength bs).	8.2x8.2
Glass Negatives - Box 1156 to 1480	RUBB/1330	c.1920	1330 Table. Resins in GR-S cements. (Resin and Bond Strength or Film thickness).	8.2x8.2
Glass Negatives - Box 1156 to 1480	RUBB/1331	c.1920	1331Table. Filler and resins in GR-S cements.	8.2x8.2
Glass Negatives - Box 1156 to 1480	RUBB/1332	c.1920	1332 Graph. Fig.3. Relationship between load and thickness of GR-S cement for different widths of test piece. Thickness of film (mils) against load (lbs).	8.2x8.2
Glass Negatives - Box 1156 to 1480	RUBB/1333	c.1920	1333 Table. Butadiene- acrylonitrile polymer cements.	8.2x8.2
Glass Negatives - Box 1156 to 1480	RUBB/1334	c.1920	1334 Photomicrograph.	8.2x8.2
Glass Negatives - Box 1156 to	RUBB/1335	c.1920	1335 Photomicrograph.	8.2x8.2

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Glass Negatives - Box 1156 to 1480	RUBB/1336	c.1920	1336 Equipment. Close up photograph	8.2x8.2
Glass Negatives - Box 1156 to 1480	RUBB/1337	c.1920	1337 Scales. Close up photograph	8.2x8.2
Glass Negatives - Box 1156 to 1480	RUBB/1338	c.1920	1338 Scales and pendulum. Close up photograph	8.2x8.2
Glass Negatives - Box 1156 to 1480	RUBB/1339	c.1920	1339 Photomicrograph.	8.2x8.2
Glass Negatives - Box 1156 to 1480	RUBB/1361	c.1920	1361 Film. Plant interior. Mid -shot photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1362	c.1920	1362 Film. Equipment. Close up photograph	8.2x8.2
Glass Negatives - Box 1156 to 1480	RUBB/1363	c.1920	1363 Film. Machinery piece. Close up photograph	8.2x8.2
Glass Negatives - Box 1156 to 1480	RUBB/1364	c.1920	1364 Film. Operations room. Close up photograph	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1365	c.1920	1365 Film. Clarks shoes sole template. Close up photograph	8.2x9.5

Glass Negatives - Box 1156 to 1480	RUBB/1366	c.1920	1366 Film. Graph. Change of conductance with state of cure	8.2x8.2
Glass Negatives - Box 1156 to 1480	RUBB/1367	c.1920	1367 Film. Graph. Conductance temperature curves for EPC black in GR-S. (Conductance against temperature)	8.2x8.2
Glass Negatives - Box 1156 to 1480	RUBB/1368	c.1920	1368 Film. Graph. Conductance-temperature curves for blacks of different particle size. 40 parts black in natural rubber.	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1369	c.1920	1369 Film. Graph. Conductance-temperature curves for carbon black/silica mixtures in natural rubber.	8.2x8.2
Glass Negatives - Box 1156 to 1480	RUBB/1370	c.1920	1370 Film. Diagram. Fig.3. Schematic diagram of inlet gland.	8.2x8.2
Glass Negatives - Box 1156 to 1480	RUBB/1371	c.1920	1371 Film. Diagram. Fig.4 Plastics, January 1941. The method as applied to the coating of airscrews.	8.2x8.2
Glass Negatives - Box 1156 to 1480	RUBB/1372	c.1920	1372 Film. Diagram. Kolofol process diagrammatic.	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1373	c.1920	1373 Film. Diagram. Fig.1. Methods of application. (External and internal crimping)	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1374	c.1920	1374 Film. Graph. Stress against strain. Fig.3. Typical stress-strain curves for 3 metals commonly used in rubber crimping forming.	8.2x10.8
Glass Negatives - Box 1156 to	RUBB/1375	c.1920	1375 Film. Diagram. B-Light service. Fig.4 Groove design for severe and light service.	8.2x10.8

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Glass Negatives - Box 1156 to 1480	RUBB/1396	c.1920	1396 Film. Workers in storage unit. Mid -shot photograph	6.0x8.7
Glass Negatives - Box 1156 to 1480	RUBB/1398	c.1920	1398 Film. Chart. Sources of information.	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1399	c.1920	1399 Film. Table. ICCRI Code. Main framework.	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1400	c.1920	1400 Film. Table. ICCRI Code; auxiliary table.	8.2x10.8
Glass Negatives - Box 1156 to 1480	RUBB/1458	c.1920	1458 Film. Covering slides. Hand making of bulbs.	4.7x11.3
Glass Negatives - Box 1156 to 1480	RUBB/1459	c.1920	1459 Film. Covering slides. Hand making of bulbs.	4.7x11.3
Glass Negatives - Box 1156 to 1480	RUBB/1460	c.1920	1460 Film. Covering slides. Hand making of bulbs.	4.7x11.3
Glass Negatives - Box 1156 to 1480	RUBB/1461	c.1920	1461 Film. Covering slides. Hand making of bulbs.	4.7x11.3
Glass Negatives - Box 1156 to 1480	RUBB/1462	c.1920	1462 Film. H.F. Welding & Blow moulding of bulbs.	4.7x13.47

Glass Negatives - Box 1156 to 1480	RUBB/1463	c.1920	1463 Film. H.F. Welding & Blow moulding of bulbs.	4.7x1347
Glass Negatives - Box 1156 to 1480	RUBB/1464	c.1920	1464 Film. H.F. Welding & Blow moulding of bulbs.	4.7x1347
Glass Negatives - Box 1156 to 1480	RUBB/1465	c.1920	1465 Film. H.F. Welding & Blow moulding of bulbs.	4.7x1347
Glass Negatives - Box 1156 to 1480	RUBB/1466	c.1920	1466 Film. H.F. Welding & Blow moulding of bulbs.	4.7x1347
Glass Negatives - Box 1156 to 1480	RUBB/1467	c.1920	1467 Film. Seaming of tubing.	4.7x1347
Glass Negatives - Box 1156 to 1480	RUBB/1468	c.1920	1468 Film. Seaming of tubing.	4.7x1347
Glass Negatives - Box 1156 to 1480	RUBB/1469	c.1920	1469 Film. Seaming of tubing.	4.7x1347
Glass Negatives - Box 1156 to 1480	RUBB/1470	c.1920	1470 Film. Seaming of tubing.	4.7x1347
Glass Negatives - Box 1156 to 1480	RUBB/1471	c.1920	1471 Film. Seaming of tubing.	4.7x1347
Glass Negatives - Box 1156 to 1480	RUBB/1472	c.1920	1472 Film. Seaming of tubing.	4.7x1347

Glass Negatives - Box 1156 to 1480	RUBB/1473	c.1920	1473 Film. X-rays.	4.7x12.5
Glass Negatives - Box 1156 to 1480	RUBB/1474	c.1920	1474 Film. X-rays.	4.7x12.5
Glass Negatives - Box 1156 to 1480	RUBB/1475	c.1920	1475 Film. Hot water bottles.	3.0x7.8
Glass Negatives - Box 1156 to 1480	RUBB/1476	c.1920	1476 Film. Hot water bottles.	3.0x7.8
Glass Negatives - Box 1156 to 1480	RUBB/1477	c.1920	1477 Film. Hot water bottles.	3.0x7.8
Glass Negatives - Box 1156 to 1480	RUBB/1478	c.1920	1478 Film. Extruding.	3.0x7.8
Glass Negatives - Box 1156 to 1480	RUBB/1479	c.1920	1478 Film. Extruding.	3.0x7.8
Glass Negatives - Box 1156 to 1480	RUBB/1480	c.1920	1480 Film. Extruding.	3.0x7.8

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