Articles.	Rates of Duty. Frs. Cts.			
Linen or hempen tissues, pure				
or mixed:				
Handkerchiefs of any kind,	12 handkerchiefs			
in the piece or not, with	0.30			
or without embroidery )				
Small wares, ribbons, lace, tulle, gimp lace, embroid-				
eries blonds oil cloth				
eries, blonds, oil cloth, millinery, clothes, linen,				
and all other articles made				
up, wholly or in part, or				
made other than in the				
piece	3 p. c. ad val.			
Oll and the street	The state of the s			
Single width	Metre	0.04		
Double width	0 -	0.06		
Of wool or hair, pure or mixed:		0.20		
Cloth, figured or plain	39	0.20		
Small wares, ribbons, lace,				
blonds, tulles, millinery,				
clothes, and all other articles made up, wholly				
or in part, or made other				
then in pieces	4 p. c. ad va	1.		
Others, in the piece, single	1			
width	Metre	0.08		
Do., do., double width	"	0.12		
Of silk or silk waste, pure or				
mixed:	and the second second			
Handkerchiefs	7 handkerchiefs			
		2.00		
Small wares, ribbons, lace,				
blonds, tulles, millinery,				
clothes, and all other				
or in part, or made other				
than in the piece	7 p. c. ad va	AL.		
Other, in the piece		0.40		
Of vegetable fibres not men-				
tioned above, and of hair.	4 p. c. ad va	1.		

one metre.

INDIAN MEASURES OF LENGTH ACT, 1889.—A communication, dated the 2nd May last, has been received from the India Office, enclosing copy of the Indian Measures of Length Act, 1889. By this Act, which received the assent of the Governor-General on the 15th February, it is provided that the imperial standard yard for the United Kingdom shall be the legal standard measure of length in British India, and be called the standard yard. This Act is in connection with the Indian Merchandise Marks Act.

## Joint Stock and Financial Hews.

COTTON COMPANIES.

THE ROACH MILLS SPINNING AND MANUFACTURING

THE ROACH MILLS SPINNING AND MANUPACTURING COMPANY, HEYWOOD, has a profit of £688 1s. 5d. for the past six months, and the directors propose to pay a dividend of 71 per cent. per annum, and carry forward £238 1s.

THE DERBY MILLS SPINNING AND MANUPACTURING COMPANY, HEYWOOD, have just declared a loss of £274 17s. 6d. for the three months. This adverse result is said to be owing to the continuous badness of the wearing trade.

THE FERN SPINNING COMPANY, SHAW, OLDHAM, took stock on Saturday last for the past six months, and announced the profit to be about £4,700. For the past three months the dividend will be at the rate of 15 per cent. per annum. Last quarter, the interim dividend was 10 per cent. per annum. The share capital is £45,000; looms, \$0,537; mortgage, £20,000. Spindles, \$7,244 (14,412 T and 72,832 W). Mill fireproof. Company was formed in 1884.

SHILOH SPINNING COMPANY, ROYTON.—Profit, three months, £349. The adverse balance last quarter was £2,436. Share capital, £17,793. Loans, £22,366. Spindles, \$7,638 (14,496 T and 22,636 W). Plant three months ago, £29,304. Company formed 1874.

At the close the feeling for mill shares (says the Times of India of the 3rd inst.) was quiet, owing, of course, to the present advance in the price of cotton, The directors of the Petit Mills have during the week proposed to pay Rs. 50 per share dividend for the past half year. The directors of the Oriental Spinning Mills have declared a dividend of Rs. 10 per share for the same period. This last is considered small and unsatisfactory, and has given rise to considerable grumbling amongst the shareholders. The mill in question has a good reserved fund, which, it is argued, must be utilised at times when the profits made are small.

### NEW COMPANY.

THE TARPAULIN, BRATTICE CLOTH, AND LINGLEUM

THE TARPAULIN, BRATTICE CLOTH, AND LINGUES COMPANY, LIMITED.

Registered by Mr. R. Jordan, 120, Chancery-lane, W.C., with a capital of £25,000 in £10 shares. Object, to carry on business as tarpaulin, brattice cloth, lineleum, corticine, sack manufacturers, &c.

cloth, linoleum, corticine, sack manufacturers, &c.
First subscribers:—
G. W. Elliott, M.P., Scruton Hall, Bedale. 1
J. Hopper, Tyne Dock. 1
W. Armstrong, junr., Wingate 1
F. Stobart, Penshaw House, Fence Houses. 1
J. Burn, junr., Cullercoats. 1
M. Liddell, Hexham. 1
R. Boyd, Houghton-le-Spring 1
The first directors to be appointed by the subscribers to the memorandum of association.
Qualifications 50 shares. Remuneration to be determined in general meeting.

# OLDHAM AND DISTRICT LIMITED COMPANIES SHARES.

Company.	Nom. am'nt per share.	Paid.	Latest Dividends.		Price.	
	£	£	Prev	Last	-	у.
Albany Albany Albert Arkwright Arkwright Arkwright Arkwright Astley Bankside Belgian Borongh Borongh Borongh Borongh Borongh Borongh Cavendish Central Chadderton Coldnurat Commercial Creavford Cre	# 5255555555555555555555555555555555555	业 \$P\$ \$P\$ \$P\$ \$P\$ \$P\$ \$P\$ \$P\$ \$P\$ \$P\$ \$P	Prev   8   11   10   10   10   10   10   10	East 10 4 10 10 10 10 10 10 10 10 10 10 10 10 10	5. par. 13 3 78 28 28 28 28 29 20 43 14 130 11 11 11 11 11 11 11 11 11 11 11 11 11	1 Id 164 1 1
Noyton Ridgefield Shaw Shiloh Smalibrook Stalybridge Stanybridge Stantey Stook Lane Stook Lane Stook Lane United West End West End West End West Word Window Window Window Wented Woodstook	5	- 3	70 70 121 10 5 31 91 60	63	7.6	37d 8/6d

## Bazette Rews.

PARTNERSHIPS DISSOLVED.

Papadopoules and Daropoulos, Manchester, ship-

pers. T. Livesey and Son, Blackburn, cotton manufac-

H. Ashworth and Brothers, Todmorden, cotton

H. Ashworth and Brothers, Todhibatell, cotton manufacturers.
R. Wilson and Sons, Batley, woollen cloth manufacturers; as far as regards H. Wilson.
Harrop and Percival, Longfield Mill, Oldham, cotton doublers.
Hibbert and Stubley, Silkhouse-lane, Tithebarnstreet, Liverpool, cotton brokers.
Haring, Mayer and Co., Sackville-street, Manchester, merchants and shippers.

RECEIVING ORDERS.

RECELVING ORDERS.

Hartley Pickles, Bramley-street, Bradford, reed manufacturer; Bradford.

Miles Hall and Herbert Hall, Port Place, Leeds, cloth manufacturers; Leeds.

Edward and Moses William Tapling (trading as E. Tapling and Co.), Orange-street, Bethnal-green, carpet and rug manufacturers.

John Ernest Figgures, Luton, late trading as bleacher, and dyer, in partnership with A. E. Bleacher, and dyer, in partnership with A. E.

bleacher and dyer, in partnership with A. E., Figgures as Figgures Bros., then straw goods manufacturer, now commercial traveller. Philip Ashmole Heslop, Ashton-upon-Mersey, and Manchester, merchant.

FIRST MEETINGS AND PUBLIC EXAMINATIONS.

Jesso Archer, Wakefield, cocoa fibre matting manufacturer; June 6, Court House, Wakefield.

ADJUDICATIONS.

Miles Hall and Herbert Hall, Larchfield Mill,
Hunslet, cloth manufacturers.
Jesse Archer, Alverthorpe-road, Westgate Common,
Wakefield, cocoa fibre matting manufacturer.
Henry Edward Foster (trading as H. E. Foster
and Co.), Thornton and Bradford, worsted spinner
and stuff manufacturer.
Philip Ashmole Heslop, Ashton-upon-Mersey and
Manchester, merchant.

NOTICES OF DIVIDENDS.

James Gott and Emmott Gott, Bradford, worsted spinners—first and final dividend of 8d., June 6; 32, Godwin-street, Bradford, wool and waste dealer—second and final dividend of 3s. 2½d.; Mr. B. Moulding, 7, Lee-street, Bradford.

Samuel Wareham and Edward Haynes (trading as Wareham and Co.), Hyde, Cheshire, hat manufacturers—first and final dividend of 2½d., May 28; 77, King-street, Manchester.

Henry Barber, Heckmondwike, near Dewabury, rag merchant; 4s. 1d., first and final.

Isaac Bradley, Prospect Mill, Bruntcliffe, Morley, and 19, Park Place, Leeds, woollen manufacturer; 7½d., first and final.

SCOTCH SEQUESTRATIONS,
George Turner, St. George's Place, Glasgow,
merchant.

## Datents.

### APPLICATION FOR PATENTS.

The names in italics within parentheses are those of Communicators of Inventions.

Where Complete Specification accompanies Appli-cation an asterisk is suffixed.

13rh May, 1889.
7928. Henry Haworth and Joseph Piokles
Binns, Commercial-street, Halifax. An improved
means and method of fastening leather on to rollers
employed in the spinning, twisting, and drawing of
varies.

employed in the spinning, twisting, and drawing of yarns.

7953. Peter Pearson and Albert Godward.

45. Southampton Buildings, London. Improved machinery and apparatus applicable to jacquard card punching machines.

7957. Carl Hollender, 191, Fleet-street, London. Improvements in the manufacture of stamped volvet and similar materials.

7960. Richard Schabensky, 46, Lincoln's Inn Fields, London. Improvements in reeds for looms.

7961. Roose Charrier, 46, Lincoln's Inn Fields, London. Improvements in shuttle-guard apparatus for use in looms for weaving.

7967. Alfred Julius Boult, 323, High Holborn. Middlesex. Improved fabric. (Casimer Coste, France.)

7977. Sidney Pitt, 24, Southampton Buildings, London. The production of new blueish-black colouring matters. (Leopold Cassel'o and Co.,

14тн Мач.

8005. James Proctor, 4, St. Ann's square, Manchester. Improvements in mechanical stokers for steam boiler and other furnaces.

8006. JAMES CULPAN and HENRY COCKROFT, 4. St. Ann's-square, Manchester. Improvements in or

St. Am s-square, Manchester. Improvements in or applicable to looms for weaving.

8099. JOHN STOCKS and WHLL LORD, 17, St. Ann's-square, Manchester. Improvements in travelling flat carding engines.

#### 15TH MAY

8074. THOMAS S074. THOMAS FRANCIS MYERS, SUNDINGE Chambers, Bradford, Yorkshire. Improvements in the method of making up woven fabrics in the piece. 8079. BENJAMIN ALFRED DOBSON and WALTER HAMER and WILLIAM BUTTERWORTH, 17, St. Ann's-FRANCIS MYERS, Sunbridge

square, Manchester. Improvements in machinery for opening and cleaning cotton and other fibres.

8007. JOHN ALSTON HART and CHARLES BAYNES,
47, Lincoln's Inn Fields, London. Improvements in or connected with machines for blowing, beating, and forming into laps cotton or other textile

material.

8106. VLADIMIS SCHEVELIN and PETER MINDOVSKY,
28, Southampton Buildings, London. Process for
the treatment of vegetable fibres by means of acid
neutral and alkaline residues of naphtha manufacture, or especially prepared substances analogous to such residues.
8107. VLADIMIR SCHEVELIN and PETER MINDOVSKY

28, Southampton Buildings, London. Process for cleansing and bleaching fibrous substances, and for firing organic colouring matters thereon by means of acid and alkaline residues of naphtha manufacture or of specially prepared substances analogous

#### 16TH MAY.

8124. DANIEL STANDRING INGHAM, Highgate-terrace, Dewsbury, Yorkshire. An improved bed or foundation plate for rag pulling machines. 8127. John Thompson, of the firm of Messrs. CURTIS, SONS and Co., and THOMAS BARKER, 4, St.

CURTIS, SONS and Co., and THOMAS BARKER, 4, St. Ann's-square, Manchester. Improvements in clothing the "flats" of carding engines, and in apparatus employed therfor.

8153. EDWIN JAMES OATES, ARTHUR DONALD OATES, and WILLIAM EARNSHAW, 8, Quality Court, London. Improvements in the method of and apparatus for driving the spindles and regulating the drag of bobbins on roving and drawing frames, also applicable to spinning and other machinery.

8154. EDWIN JAMES OATES, ARTHUR DONALD OATES, and WILLIAM EARNSHAW, 8, Quality Court, London. Improvements in the method of and apparatus for lubricating the spindles of spinning and twisting machinery.

and twisting machinery.

8155. WILLIAM WALKER, 8, Quality Court,
London. Improvements in asbestos and india-

where sheet, rope, and washers.

8156. Henry Harris Lake, 45, Southampton Buildings, London. Improvement in the manufacture of amidophenols. (Messrs. Wirth and Co., agonts of A. Leonhardt and Co., Germany.)

8191. Josef Kristen, 4, South-street, Finsbury,

London. Improvements in the process of and means

for dyeing hides. 8194. Henry Baptist Bury, James Bury, and JOHN ISAAC DAVIES, 65 and 66, Chancery-lane, London, A process for removing grease from sheep and lamb pelts before fleshing and splitting.

## 17TH MAY.

8205. Shadlock Wilkinson, James Clarkson, and Frederick Heap, 67, Waterloo-road, Burnley, Lancashire. An improvement in cup for ring-

spinning and bobbins adapted for same.

8206. Whitzehead Intson, 8, Quality-court,
London. Improvements in the method of and
apparatus for protecting the healds or gear of

8216. CHARLES JONES and RICHARD TOLSON, Fazeley, near Tamworth. Improvements in looms for manufacturing a curved-shaped combined waist

band and skirt binding.\*
8220. Thomas Bastow and Thomas Henry Shaw, Sunbridge Chambers, Bradford, Yorkshire. Improve-ments connected with the mounting of the circles of combing machines.\*

of combing machines.

8237. THOMAS PARKINSON, 44, Chancery-lane,
London. Improvements in the methods of mordanting by drying cotton yarns and similar substances, and in the apparatus therefor.

8253. AUGUSTE DESIRE THIRION, 28, Southampton

Buildings, Chancery-lane, London. Improved regulating mechanism for tulle or bobbin net

8260. JOHN JACKSON ASHWORTH, 70, Chancerylane, London. The manufacture of a new or improved fabric."

8261. HENRY FAWCETT, Kidderminster. Improvements in the manufacture of bordered carpets and other fabrics, and in looms for the same.

8262. ROBERT HENRY LENDRUM and DAVID DYTCH, 24, Southampton Buildings, London. Improvements in apparatus to be used in the manufacture of knitted pile fabrics.

### 18TH MAY.

S286. ELI CRUISE and BENJAMIN BERRY, 128, College-road, Bradford, Yorkshire. Improvements in spraying oil, water or any other liquid material on to wool in process of washing, carding, or combing, also for damping woven stuffs or cloths, 8299. BENJAMIN WILLCOX, 47, Lincoln's Inn Fields, London. Improvements in or connected with the manufacture of acco-colouring matters for printing and dyeing. (The Farbenfabriken vorm. Freidrich Bayer and Co., Germany.)

## SPECIFICATIONS PUBLISHED. 1888.

6542 THOMPSON. Looms. 8d. 8257 LEBMING. Spinning fibres, &c. 8d. 9118 WARSON. Drawing and roving frames. 8d. 9124 Kenn. Printing on fabrics, 8d.

9242 TAYLOR and HEYWOOD. Ironing machines.

Sd. 9255 CASPER. Looms. 8d.

9382 Platt and Fibler. Carding engines. 8d. 9406 Shaw. Spinning flyers. 8d. 6633 Lister and Batty. Combing machines.

9932 HILTON and HILTON. Looms. 8d. 10,191 THOMPSON (Bölsterli.) Spinning, twisting, &c. 8d.

16,133 Leigh. (Williams.) Colouring matters. 6d. 1889.

472 Mullers and Spindler. Velvet and plush

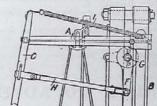
goods. 8d.
4404 MEYER. Para-dioxy-benzol. 4d.
4431 RADFORD. Preparing wool, &c. 4
4852 Harrio. Sewing machines. 8d.

## ABSTRACTS OF SPECIFICATIONS.

147. January 4th, 1883. Clutches. O. Flohr, 1528, Main-street, Buffalo, U.S.A.
Relates to that class of clutches having split friction rings or segmental friction blocks operated

by toggle levers.

150. January 4th 1888. Overpick looms. R.
HUNTER, 13. Beaconsfield Terrace, and T.
McCREADIE, Wellington-street, both in Hawick.



The picker is operated directly by the stick C, which is connected (as shown) by an arm A and spring I with the lay-sword B, and by a rod H with an arm F on the ordinary picking-shaft G. [6id.]

170. January 4th, 1888. Sulpho-acids. C. D. ABEL, 28, Southampton Buildings, London.—(G. C.

Zimmer; Mannheim, Germany.)

Consists in heating diphenylamine with about the theoretical quantity of sulphuric acid of 66 deg. Bé, to 140 deg. or 150 deg. C. The product is free from disulpho acid and consists chiefly of a-monosulpho acid together with some b-monosulpho acid. These acid together with some b-monosulpho acid. These are more or less completely separated by boiling their soda salts with alcohol of 90 to 95 per cent, filtering and crystallising from the filtrate the a-acid. Or the separation may be effected by fractional crystallisation of the soda, baryta or lime salts from water: the greater part of the a-acid being thus first obtained from the mixture. The sulpho acids are to be employed in the manufacture of colouring matters. [6id.] 203. January 5, 1888. Belt-fastener. H. Gitters, Reddish, Cheshire.

Made by stamping or otherwise from sheet steel or other suitable material; it is provided on either side with one or more rows of teeth stamped from the body of the fastener and turned up so as to

leave spaces. [6]4.]

215. January 5, 1888. Knitting. J. UPSDALE,
4, Falcon Avenue, London.
Alternate bands of thickened work for the tips of
glove fingers, &c., are formed in fabrics made in traverse warp machines by not casting the loops off the needles in alternate courses, by laying a weft

thickening thread on the needles between the courses, or by both of these methods. To form these knock-off courses in machines of the kind described in Specification No. 13,635, A.D. 1851, the cam for giving forward motion to the sinkers and the presser cam are formed with removable swells. The weft thread may be laid on the needles by

the presser cam are formed with removable swells. The weft thread may be laid on the needles by hand. [8]d. Drawings to Specification.]

281. January 6, 1888. Bath mat. J. E. ALLNUTT, 754, Little Britain, London.

A mat constructed of absorbent material, such as looped or knotted fabric backed by a waterproof material, preferably a rubber-coated fabric. The two fabrics are secured together by binding sewn round the edges. [44d. No Drawings.]

329. January 7, 1888. Scouring or dyeing. J. and J. C. Monland, Glastonbury, Somersetshire.

Relates to a method of and apparatus for scouring or dyeing woollen rugs or skins, with or without the wool or fur upon them, or any woollen fabric or leather. The sheep-skin or other larging. The article is then acted upon by brushes fixed at intervals in a rotary cylinder within a casing. The tendency of the brushes to draw the skin or fabric too rapidly over the roller, may be counternacted by a pawl and ratchet wheel in connection with the latter. [84d.]

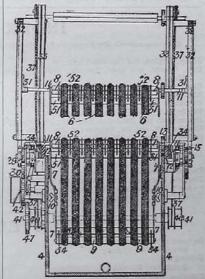
latter. [84d.] 335. January 9, 1888. Spinning. J. V. Eves.

335. January 9, 1888. Spinning. J. V. Eves, Brooklands, Knock, Down.

Moistening apparatus for wet spinning, &c. frames.

—The water supply pipe is fitted with a series of taps each consisting of a taper tube passing through the pipe and fitted with a hollow or grooved plug, suitable ports being formed in the tube and in the hollow plug. (Sad) hollow plug. [8]d]

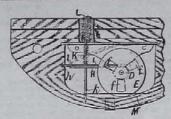
336. January 9, 1888. Dyeing yarns. J. B.
McKay, Comely Bank House, Galashiels.



Hanks of yarn 6 are placed on frames consisting of side pieces 7 adjustable in length by a screw pin 10 to keep the hanks tant. The side pieces 7 carry rollers 8 and 9 at top and bottom, supporting the hanks, and shafts 51 and 53 carrying prongs 52 and 54 for keeping the hanks in position. The frames are placed in a vat 4, the shafts 11 of the rollers 8 resting on ways 12. The frames are moved from end to end of the vat by endless chains 15 with projections at intervals which engage the shafts 11. At the same time the rollers 8 are rotated by the pinions 13 on their shafts engaging a rack 14 on the top of the vat. As each frame reaches the end of the vat the ends of the shafts 11 are caught by hooks 31 on an endless chain 32, whereby they are first lifted vertically to the position shown in dotted lines, then carried back horizontally above the vat, and finally lowered again it at the other end. The frames may also, when necessary, be lifted simultaneously out of the vat by means of bars 34, the ends of which run in guide-ways on vertical pillars 33 at the corners of the vat. These bars are raised by ropes or chains 37 passing round pulleys at the top of the pillars, and round drums 40 driven from the main driving shaft 42 by sliding the spur wheel 30 out of gear with the wheel 27 and into gear with the shaft 41 for operating the drums, [3]d.]

387. January 10, 1888. Loom shuttles. H. and T. Burgers, Congleton, Cheshire, and C. Clax, Dale-street, Manchester.

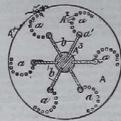
Relates to shuttles used in looms for weaving small wares such as tapes, bindings, galloons, trimmings, ribbons, &c. The spindle D for the bobbin E is mounted, at right angles to the longitudinal axis of the shuttle, upon a plate C, so that the bobbin will be vertical when in use. Tension is

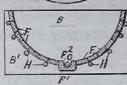


preferably applied by a plate H bearing on the weft and carried by a wire I hinged at h, such plate being pressed on by a spiral spring K adjustable on a holding wire k by means of a screw L. In a modification a bow spring is used to press on the plate. The bridle M for taking up the slack is passed right through the shuttle and projects both above and below. Holes / may be provided in the flanges of the bobbin to show the quantity of yarn upon the latter. [84d.]

the bobbin to show the quantity of yarn upon the latter. [84d.]
394. January 10, 1888. Vulcanised soft-rubber. F. Wilhoff, New York, U.S.A.
Rendering vulcanised soft-rubber non-blooming. For this purpose the rubber is mixed with a sulphur preparation in which the sulphur has been rendered permanently amorphous by being fused with any fatty, greasy, resinous, or turpentine-like body. [44d. No Drawings.]
402. January 10, 1888. Dyeing. H. H. LAKE,

Southampton Buildings, London.-(U. Weldon; Coloes, New York, U.S.A.)





Consists of a rotary dipping wheel A mounted in a semi-circular vat B. The wheel consists of two end discs At connected by a hub A<sub>5</sub> and by longitudinal rods At forming pockets a approximately semi-circular; the innermostrods a<sub>1</sub> are stronger and support the outer ends of radial rods b which complete the partitions. As the wheel rotates the materials perform a half revolution in rolling out of the norders. The vat is formed of strips F entering the pockets. The vat is formed of strips F entering grooves in end pieces B<sup>1</sup>, which are held togother by bolts H. The bottom strip F<sup>1</sup> is deeper and contains in a groove F<sup>2</sup> a perforated steam pipe C for heating the dye. [8\frac{1}{2}d.]

432. January 11, 1888. Embroidery. J. H. HOLLINGHUBST, 21, Calthorpe-street, London, W.C. Suiss embroidery machine.—The ordinary rollers are replaced by a frame consisting of two bars with rows of holding points, held apart by two double screws or by laths and pins.

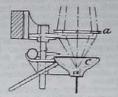
Preparing Fabrics.—A canvas backing is secured on the points and stretched. Pieces of material to be embroidered are pasted on the back and arranged face downward on a table roughened by attached sand-paper or otherwise and the frame and canvas are lowered on them, suitable guides being provided, The table has grooves in which strings are previously iaid, the ends of which are now secured to the frame so that it may be lifted with the pieces and allowed to dry.

so that it may be lifted with the pieces and anowed to dry.

Embroidery with worsted yarn or other thick material.—Pieces of the worsted are twisted and doubled, and the loops thus formed connected by silk with the needles. The needles are made with wide eyes and long grooves. [8]d.]

440. January 11, 1888. Wet twisting frames.

J. BARBOUR, and A. COOMBE, Falls Foundry, Belfast.



The "forming tube" or eye a is surrounded by a cup c containing the liquid, and the threads pass to it over a disc d daving guide notches out in the edge, or over hooks arranged in a circle within a shallow

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Blackman Ventilating Co., Limited: cover iv.
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Coulthard, T. and Co., Preston: x, April 27th.
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Manchester: i., April 27th.
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Green, James, Blackburn: x.

current issue, the date of their last appearance is given.

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Hacking and Co., Bury: vii.

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Holden, G. H., and Co., Manchester: iv.

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May 18th.

May 18th.
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Schofield and Kirk, Huddersfield: iv. of cover, May
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wells, M., and Co., Manchester: iv. of cover. Wilson, Brothers, Cornholme, Todmorden: iii.

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Kay, John, Rochdale.
Wilson Brothers, Todmorden.
Calenders:

Calenders:

Hoyle, E., and Sons, Limited, Halifax. Chemicals: Grimshaw Bros., Clayton, Manchester.

Cop-Tubing Apparatus: Jagger and Co., Oldham.

Gold and Silver Wire: Makinson, E. and W. G., Preston.

Dust Fuel Furnace: Donkin, B. and Co., London.

Emery Filleting: Dronsfield Brothers, Oldham.

Engineering Work:
Hoyle, E., and Sons, Limited, Halifax.

Hydraulic Presses:
Hoyle, E., and Sons, Limited, Halifax.

Hydro-Extractors: Broadbent, Thomas, and Sons, Huddersfield.

Indicators:

Orme, G., and Co., Oldham Lattices, Pegs, Jacquard Slips, &c. Stone and Burnett, Preston. Looms:

Butterworth and Dickinson, Burnley. Dugdale, John, and Sons, Blackburn.

Hacking and Co., Bury. Hall, Robert, and Sons, Bury. Livesey, Henry, Limited, Blackburn. Platt Brothers and Co., Limited, Oldham. Schofield and Kirk, Huddersfield.

Platt Brothers and Co., Limited, Oldham. Schofield and Kirk, Huddersfield.

Machinery (Cotton):
Coulthard, T. and Co., Preston.
Curtis, Sons and Co., Manchester.
Holden, G. H., and Co., Manchester.
Horrocks, John and Son, Manchester.
Horrocks, John and Son, Manchester.
Howard and Bullough, Acerington.
Hurst, W., Rochiale.
Lees, Asa, and Co., Limited, Oldham.
Platt Brothers and Co., Limited, Oldham.
Stubbs, Joseph, Manchester.
Tatham, John, and Sons, Limited, Rochdale.
Taylor, Lang and Co., Stalybridge.
Machinery (Silk):
Coulthard, T. and Co., Preston.
Curtis, Sons and Co., Manchester.
Holden, G. H. and Co., Manchester.
Horrocks, John and Son, Manchester.
Hent, Brothers and Co., Limited, Oldham.
Stubbs, Joseph, Manchestor.
Taylor, Lang and Co., Limited, Stalybridge.
Machinery (Woollen and Worsted):
Coulthard, T. and Co., Preston.
Curtis, Sons, and Co., Manchester.
Holden, G. H. and Co., Manchester.
Holden, G. H. and Co., Manchester.
Horrocks, Jno., and Son, Manchester.
Horrocks, Jno., and Son, Manchester.
Horrocks, Jno., and Son, Limited, Oldham.
Platt Brothers and Co., Limited, Oldham.

Taylor, Lang and Co., Stalybridge.

Oils: Wells, M., and Co., Manchester.

Picker Steeper: Green, James, Blackburn.

Pistons:

Lancaster and Tonge, Pendleton. Sizing and Filling Preparations:

Adley, Tolkien, and Co., Blackburn.

"Gloy" Manufacturing Co., London.
Grimshaw Brothers, Clayton, Manchester.
Sprinklers, Automatic:
Bradshaw, A., Accrington.
Dowson, Taylor, and Co., Limited, London.
Steam Traps:

Steam Traps:
Lancaster and Tonge, Pendleton,
Tambouring Threads, Braids, &c:
Makinson, E. and W. G., Preston.
Technological Handbooks:
Bell, George and Sons, London.
Brooks, C. P., Stalybridge.
Thomas, George and Co., Manchester.
Ventilation:
Blackman Ventilating Co., London,
Matthews and Yates, Manchester.

Biackman Ventilating Co., London, Matthews and Yates, Manchester. Rothwell, John, Farnworth. Wire, Gold and Silver: Makinson, E. and W. G., Preston, Yarn Assorting Balance: Thomas, G. and Co., Manchester. Yarns, Coloured: Makinson, E. and W. G. Parates.

Makinson, E. and W. G., Preston. Yarn Testing, &c., Machine: Wallwork, Henry and Co., Manchester.