

James Spencer (trading as Spencer and Guardale), Bury Ground Works, Bury, cotton waste bleacher and dealer, 17s., first and final.

John Calvert, Park Lodge, Halifax; William Frederick Calvert, 13, Church-street, Halifax; Hy. Calvert, Ovenden-road, Halifax, and Frank Calvert, Iona-street, Boothtown, Halifax (trading as Calvert Bros.), Ladyship Mills and Boothtown Mills, Halifax, worsted spinners: 9d., second.

Jno. Calvert (separate estate), Park Lodge, Halifax, worsted spinner, trading with Wm. Fredk. Calvert, Henry Calvert, and Frank Calvert, as Calvert Bros.; 20s., first and final.

Thomas Jessop, lately residing at Stansfield-road, Todmorden, Yorkshire, and trading at Vale Mills, Todmorden, now residing at Clara-street, Fartown, Huddersfield, formerly reed maker, now out of business; 1s. 9d., first and final.

#### PARTNERSHIPS DISSOLVED.

Kearsley, Stevenson, and Co., Glasshouse-street, Regent-street, Middlesex, woollen warehousemen. William Bamford and Sons, Bentley Mills, Meltham, near Huddersfield, silk throwsters and spinners.

Stratham and Robinson, Lea-street, Ancoats, Manchester, merchants; by death of William Robinson.

Hirst and Son, Huddersfield, wool merchants. Wrigley and Newton, Booth-street, Ashton-under-Lyne, cotton spinners.

Bayne and Son, Burnley, woollen merchants, &c. Cullen and Co., Pilcher-Gate, Nottingham, lace manufacturers.

W. and E. Jackson, Aire-street, Leeds, cloth manufacturers; Simeon Kaye retiring. William Armistead and Co., Holbeck New Mills, Leeds, woollen manufacturers.

Sam Hird and Co., Woodbottom Mills, Horsforth, York, cloth manufacturers.

## Patents.

### APPLICATION FOR PATENTS.

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

Where Complete Specification accompanies Application an asterisk is suffixed.

29TH MAY.

8888. THOMAS WILLIAMS, Bristol Bank Buildings, Bristol. An improved hook for sewing machines.

8911. ELLEN EDGE, 8, Quality Court, London. An improved method of wrapping or parcelling soluble or insoluble blue or other colours.

8912. THOMAS SINGLETON, 8, Quality Court, London. An improved positive fast and loose reed motion and buffer for saving picking bands in looms for weaving.

8924. HENRY FORREST, JAMES ROBINSON, and THOMAS FORREST, 20, Charles-street, Bradford, Yorkshire. Improvements in or appertaining to the spindles and spindle bearings of flyer spindle frames.

8930. JOHN MUIR HETHERINGTON, 1, St. James's-square, Manchester. Improvements in carding engines.

8951. MARK HORATIO TOMKINS, 6, Bream's Buildings. Improvements in the manufacture of ropes for marine and other uses.

30TH MAY.

8969. GEORGE HIRST HEBBLETHWAITE, Town Hall Buildings, Halifax. Improvements in connections for transmitting motion to the heads, and for other purposes, on looms for weaving.

9002. WILHELM VORBACH, 45, Southampton Buildings, London. Improvements in apparatus for introducing substances into steam-boilers to prevent incrustation therein.

31ST MAY 1889.

9046. ALEXANDER ANDERSON, 62, St. Vincent-street, Glasgow. Improvements in sewing machines. (*The Singer Manufacturing Co., United States.*)

9057. JULIUS ELSAS and HERMANN WEISSENBURGER, 142, Fleet-street, London. Improvements in loom shuttles.\*

9076. FRANK NORMAN BEST and RICHARD RICE, 21, Finsbury Pavement. An improved method of preparing dyes.

1ST JUNE.

9082. MICHAEL FIRTH and JOSEPH ROBERTSHAW, Sunbridge Chambers, Bradford, Yorkshire. Improvements in connection with the drawing off and method of conducting the slivers from the circular combs of "Nobles" and similar machines.

9089. DANIEL JONES, 46, Lincoln's Inn Fields,

London. Improvements in lock-stitch sewing machines.\*

9090. JAMES NAYLOR and JOSEPH KINLEY, 8, Quality Court, Chancery-lane. Improvements in the construction of skips, hampers, and other similar articles.

9092. MARSHALL HENRY PEARSON and CHARLES BENNION, 323, High Holborn, London. Improvements in or relating to clutches or locking devices, applicable more especially where mechanical movements are intermittent.

9101. JOHN JACKSON SHIERS and CHARLES MARX, 1, St. Ann's-square, Manchester. Improvements in the manufacture of fancy pile fabrics.

### APPLICATIONS FOR AMENDMENT.

Notice is hereby given that any person or persons intending to oppose any one of the undermentioned Applications must leave at the Patent Offices within one month from June 5th, notice (on Form G) of his or their objections thereto.

No. 9162. 19th June, 1884. Improvements in producing yellow colouring matter suitable for dyeing and printing.

THE FÄRBEFABRIKEN VORMALS FRIEDRICH BAYER AND COMPANY (Assignees) have applied for leave to amend the Specification of Letters Patent granted to JOHN ERSKINE, above referred to, alleging as their reasons for so doing, "That we consider that the patent is open to objection on the ground that the Specification and claim include more than is of practical value and more than was new at the date of the patent, and that the proportions of nitrate of soda and of salicylic acid require correction to correspond with the proper molecular proportions, and that the words 'unmodified' and 'salicylic' are incorrectly spelled, and it is desired to correct the clerical error in the omission of the word 'as' in the claim."

The amendments proposed are stated in full in the "Official Patent Journal" of June 5th.

No. 9606. 1st July, 1884. Improvements in producing yellow colouring matter suitable for dyeing and printing.

THE FÄRBEFABRIKEN VORMALS FRIEDRICH BAYER AND COMPANY (Assignees) have applied for leave to amend the Specification of Letters Patent granted to WILLIAM WEIR GRIEVE, above referred to, alleging as their reasons for so doing, "That we consider that the patent is open to the objection that the Specification and claims include more than is of practical value, and it is desired to correct the clerical errors in the omission of the word 'as' and in the spelling of the word 'salicylic' in the claim."

The amendments proposed are stated in full in the "Official Patent Journal" of June 5th.

No. 3803. 24th March, 1885. Colouring matters obtainable by the combination of Tetrazoditoyl- or Tetrazodixyl-salts with Alpha- and Betanaphthylamine or their Mono- and Disolpho-acids, and process for the manufacture of the same.

THE FÄRBEFABRIKEN VORMALS FRIEDRICH BAYER AND COMPANY (Assignees) have applied for leave to amend the Specification of Letters Patent granted to HERBERT JOHN HADDAN, above referred to, alleging as their reasons for so doing, "That we consider that the patent may be open to objection on the ground that the Specification and claims include more than is practically useful, and that certain clerical errors and errors in expression require correction, and that further explanation in some particulars is desirable."

The amendments proposed are stated in full in the "Official Patent Journal" of June 5th.

No. 9510. 10th August, 1885. A new manufacture of violet and blue azo dyes.

THE FÄRBEFABRIKEN VORMALS FRIEDRICH BAYER AND COMPANY (Assignees) have applied for leave to amend the Specification of Letters Patent, granted to HERBERT JOHN HADDAN, referred to above, alleging as their reasons for so doing, "That we consider that the patent is open to objection on the ground that the Specification and claims include more than is practically useful, and that certain errors of expression and clerical errors require correction."

The amendments proposed are stated in full in the "Official Patent Journal" of June 5th.

No. 14,424. 24th November 1885. Improvements in the manufacture of azo dyes.

THE FÄRBEFABRIKEN VORMALS FRIEDRICH BAYER AND COMPANY (Assignees) have applied for leave to amend the Specification of Letters Patent granted to JAMES YATE JOHNSON, above referred to, alleging as their reasons for so doing, "That we consider that the patent is open to objection on the ground of the Specification and claims including more than is practically useful, and that certain errors of expression and clerical errors require correction, and that further explanation in some particulars are desirable."

The amendments proposed are stated in full in the "Official Patent Journal" of June 5th.

### SPECIFICATIONS PUBLISHED.

1888.

6969 KIDDER and others. Knitting machines. 8d.

7822 WILKE and SCHOTT. Looms. 8d.

8719 WHITRELY. Sectional warping machines. 11d.

8811 ROSICKY. Seutching machines. 8d.

8934 TOLSON. Carbonising rags, &c. 8d.

9429 MASON. Drying and ageing cotton, &c. 8d.

9530 WRIGHT. Printing floor-cloth, &c. 11d.

9545 ASHWORTH. Hat brim stretching machines. 6d.

9600 ABEL. (*Farbwerke vormals Meister, Lucius and Bruning.*) Colouring matters. 6d.

9840 CHATREER. Chenille carpet, &c. 8d.

10,142. KNOWLES. Clearing yarn, &c. 8d.

10,161 HORNSBY and others. Knotting apparatus. 8d.

10,416 RAYNOR and DAVENPORT. Carding engines. 8d.

10,815 ARUNDEL and BROCKLEBANK. Doubling and twisting machines. 8d.

1889.

16 DENINGER. Nitro and amido phenols. 6d.

450 OLDERSHAW. Sewing machines. 8d.

4422 LEHMANN. Sewing machines. 8d.

4576 KOHLER. Sewing machines. 8d.

5206 PITT. (*Skinner and another.*) Looms. 1s. 8d.

5763 GAUGL and MOSSNER. Rendering cloths, &c. waterproof. 1d.

5885 PLATT. Cutting pile fabrics. 8d.

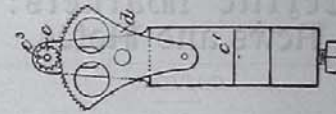
THIRD EDITION.

1879.

5305 JOHNSON, H. J. Colouring matters for dyeing and Printing. 6d.

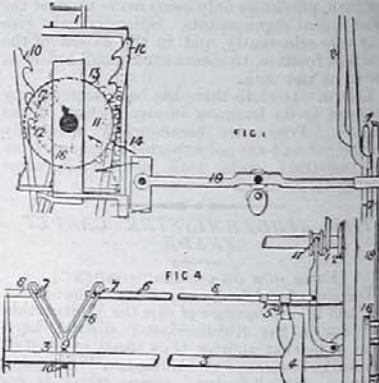
### ABSTRACT OF SPECIFICATIONS.

1206. January 26, 1888. Sewing and Embroidering Machines. W. BIRKS, 90, Birkin Avenue, and H. S. CROPPER, Great Alfred Street, both in Nottingham.



Applying ornamenting threads, &c.—In a shuttle machine for embroidering a group of designs, the needles reciprocate through central holes in pinions *c* which are carried in front of the work by brackets *d* on a fixed bar; the pinions are intermittently rotated in alternate directions by toothed segmental levers *d* and a reciprocating bar, each movement occurring when the needles leave the work. In each pinion is a hole *e*, through which passes an ornamental or beaded thread, which by each movement of the pinion is laid round the needle thread, so that when the needle again enters the work the ornamental thread is secured by the tight of needle-thread. The invention is applicable to other descriptions of sewing and embroidering machine. [8]d.]

1244. January 27, 1888. Loom drop-box and picking mechanism. M. SOWDEN, Shipley, Yorkshire.



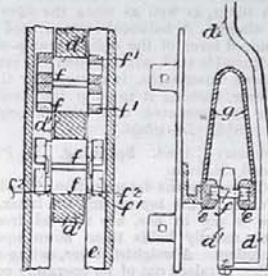
Drop-box motion.—The box 1 (Fig. 1) is operated through a rack 14 from a pinion 13 mounted on a shaft carrying a pin wheel 12. The latter is turned one way or the other by catches 10 mounted on horizontal levers carrying vertical catch rods 7 which are operated or not by a cam-worked rocking lever 19, according as they are placed by setting or indicating levers of suitable pattern mechanism. A spring piece 16 enters between wide-spaced angular teeth on a disc 11 to lock the parts in position, and is moved



clear of the teeth when a change is to be made by a treadle or by a tappet and intermediate mechanism.

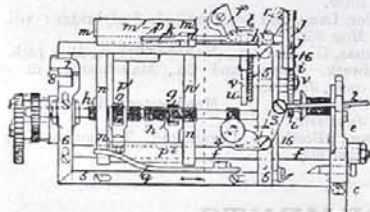
**Pick and pick arrangements.**—The picking tappets 1, 2, (Fig. 4) are put in and out of action by a fork clip 11 connected with a slide rod 6 which carries a finger 5, operated by a cam 4 on a cross shaft 3 at the back of the loom. A pin 7 on the rod 6 works in a slotted Y-lever 9 which turns on a stud 10 and operates a second slide rod 8 controlling the opposite tappets. A treadle is provided for lifting the lever 9 and putting the tappets on both sides out of action. The shaft 3 is driven by a pin disc 16 worked through a hooked rod 18 and rocking lever from a tappet. [114d.]

1267. January 27, 1888. Cotton cutters. E. BUCKLEY, Castle Iron Works, Stalybridge, Cheshire.



**Feed regulators.**—In order to allow a covering *g* to be applied to the bowls and the wedge ends *d'* of the pendants *d*, the latter are bent so as to clear the guide bars *e* and also near the ends at right angles, the wedge ends *d'* projecting upwards as shown. The bowls *f* are arranged in pairs between the pendants. Each bowl carries on its axle bowls *f'* of the same or slightly larger diameter, which take into the guides *c*; if the bowls *f'* are of the same diameter as the bowls *f* the latter are kept apart by links *f''*. In a modification the pendants are straight bars provided on their ends each with a pair of anti-friction bowls, which take against intermediate wedge-shaped pendants carried by the frame, one of the end bowls taking against the inclined face of a fixed bracket. [84d.]

1300. January 28, 1888. Spooling machinery. J. HOLROYD, H. LIEBERT, and C. MCGOWAN, Tomlinson Street, Hulme, Manchester.



**Traverse mechanism.**—The thread guide is carried by a weighted frame *c* mounted on the end of a sliding spindle *f* operated by right and left-handed screws *h* in the ordinary manner. The sliding spindle *f* carries, by means of suitable supports *n*, a frame *m*, on which is mounted a slide *m* connected by a rod to a pair of building plates or shapers *r, r'*, which can be adjusted according to the form and size of the bobbin. Within a notch in the slide *m* are provided two spring bolts with bevelled ends arranged opposite to each other, and resting against one side or other of these bolts is a tongue or projection *p* carried by an arm *p'* from a sleeve *p''* upon the sliding shaft *f*. For the greater part of the traverse the frame *m* and slide *m* move together until one or other of the shapers comes against a bar *t*, when *m* is stopped, and *m'* continuing to move, the projection *p* is brought opposite the space between the spring bolts in the slide *m*, into which it enters, and the spindle *f* is turned on its axis by springs *g* which engage beneath the arms carrying the half-nuts *g*, and the reversal is effected. The bar *t* is raised intermittently at each reversal by means of a cam *u* on the shaft *v*, which is operated by a ratchet arrangement *i, j*, the pawls of which are carried by a shaft *k* having a twisted end, which slides in and is actuated by a projection *l* on the frame *m*.

**Thread guides and carriers therefor.**—The cam *u* also, through an arrangement of levers, turns the weighted frame *c*, raising the thread guides by an amount which can be regulated by a screw and nut arrangement, according to the thickness of the thread being wound.

**Stop-motions—broken end.**—On its way to the thread guide the thread passes under a finger 2 carried by one arm of a bell-crank lever 3, the other arm of which is in the form of a catch. When the thread

breaks this catch engages with a rotating ratchet wheel 4 and is drawn in the direction of the arrow, carrying with it the frame 5, the inclined end of which raises the bar 6 and the latter releasing the catch 7 from the stop 8 allows the strap to be transferred to the loose pulley and the brake applied by means of a spring.

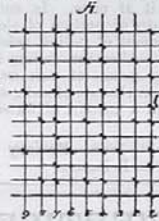
**Stop-motions—measuring.**—The ratchet wheel *i*, is provided with an adjustable stop, which, when the spool is full, comes in contact with a projection on the sliding rod 15, raising the latter and causing a projection thereon to release the spring spindle by which the stoppage is effected as in the former case. At the same time a peg 16 lifts the two pawls *j* clear of the ratchet wheel and the shaft *v* is returned to its original position by means of a spring.

**Doffing.**—Previous to the doffing operation the thread guide may be raised by turning the frame *c* and attaching it by a hook to any suitable part of the machine. [84d.]

1303. January 28, 1888. Quilts and similar figured fabrics. J. RILEY and W. and J. T. BOND, Milton Mill, Haugh, near Bolton, Lancashire.

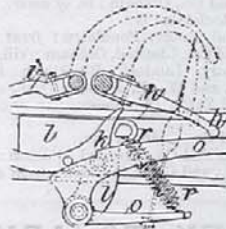
In the weaving there are employed three ends of stitching yarn in combination with one of face yarn; or four ends of stitching yarn with two of face yarn. [44d. No drawings.]

1311. January 28, 1888. Beaverteens. J. R. HUTCHINSON, Daisy Field Mills, Bury, Lancashire.



The face picks 2, 3, 5, 6, 8, 9, of ribbed beaverteens are made to float over three warp ends and under one alternately, as shown, whilst a twilled back is formed by the picks 1, 4, 7, floating under two and over one, or in other suitable manner. [64d.]

1312. January 28, 1888. Mules. R. L. HOLT, 3, Adelaide Street, Southport, and J. CARTER, Atlas Works, Stalybridge.



**Snarling, preventing.**—The pivoted lever *k* which, when the yarn becomes too slack, supports the finger *i* on the counterfaller shaft, is automatically adjusted as the winding-on proceeds by connection with the faller shaft or other convenient portion of the faller or coping mechanism. The drawing shows the lever pivoted to a bracket *l* and supported by a cam surface *n* upon a lever *o*, the position of which is governed by the spring *r* and a finger *h* on the faller shaft. [84d.]

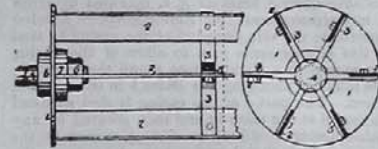
1346. January 28, 1888. Azo dyes. B. WILLCOX, 47, Lincoln's Inn Fields, London.—(Farbenfabriken vorm. F. Bayer; Elberfeld, Germany.)

Consists in combining the tetrazo compounds of benzidine, tolidine, or diamidodiphenol methyl or ethyl ethers, with *b*-naphthol-*o*-monosulpho acid or with the *a*-naphthol disulpho acid L of Schöllkopf. For example, when diamidodiphenol methyl ether is diazotised in the usual manner and the tetrazo product is run into a soda solution of the soda salt of *a*-naphthol disulpho acid L, in the proportion of one molecule of the former to two molecules of the latter, a greenish-blue dye is obtained. If the combination is effected between equal molecular quantities an intermediate compound is obtained, which may be combined with another phenol, naphthol, or sulpho acid thereof, with the production of blue dyes of various shades from reddish to greenish blue. [64d.]

1352. January 30, 1888. Felt hats. W. MORGAN, 2, Foster Lane, Cheapside, London.

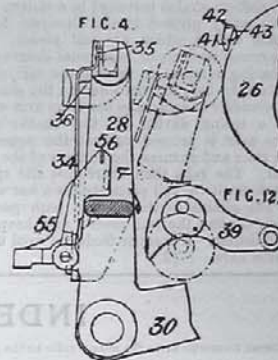
Machine for ironing and velouring, consisting of a revolving flat block mounted on a swinging shaft which can be fixed at any suitable angle by means of the handle engaging in a slotted quadrant. In a modified form the shaft is mounted in a frame which can be fixed in any desired position by means of a spring lever. [84d.]

1357. January 30, 1888. Printing, dyeing, bleaching, &c. T. WINTER, Perseverance Works, Blackburn, Lancashire.



Relates to immersion rollers. The rollers are constructed by securing to two end discs 1 laths or strips of metal 2 supported also by intermediate frames 4 with radiating arms 3. To each disc is fixed, by collars 6 and 7 and a nut 8, a stud on which the roller revolves, such studs being thus readily changed when worn. [84d.]

1411. January 31, 1888. Winding yarn, cord, &c. W. CUNNINGHAM, Gray House, near Dundee.



A double-sided drum winder with two drums 26, one on each side, for winding yarn, &c., in the form of a cylindrical ball on to tubes, &c.

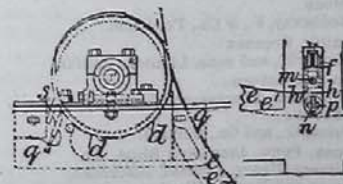
**Bobbin cradles or holders.**—The bobbin tubes, which are preferably slightly conical, are carried in the forked arm 28 of a bell crank holder, the other arm 30 of which is connected by a weighted link with a treadle, by which the ball is raised, when required, from contact with the driving drum. The tubes are held in the holder by springs 34 having removable bearing pieces 35 and provided with stops 36. Each holder is provided with an indicator in the form of a bell crank lever 55, which, when the ball has attained a sufficient size, is thrown over by it, and may then display a piece of earthenware or other material of a bright or white colour. A piece of india-rubber 56 is fixed in the lever where it is engaged by the ball.

**Tension arrangements.**—The necessary drag on the delivery bobbins is obtained by means of weighted levers 39, Fig. 12, which are provided with conical projections which render it unnecessary to lift the lever when putting a bobbin on to its pin; a stop is arranged to prevent the lever from descending too far when the bobbin is withdrawn.

**Traverse mechanism.**—The threads are passed through conical conductors 41 having wire guards 42, and carried by a light steel tube 43 into which they are fixed in such a manner as to leave only the points and their guards protruding; the tube 43 is traversed by means of a grooved cylindrical cam which operates a pivoted frame having arms which are secured to the tube by swivelling connections. The cam may be changed when desired, as also may the gearing which drives it, and the cam shaft is encased in a tube to prevent the yarn, &c., from winding round it. [114d.]

1420. January 31, 1888. Sewing Machines. W. P. THOMPSON, 6, Lord Street, Liverpool.—(M. Ehrlich and L. Bendix; Hanover, Germany.) Relates to braiding, &c.

1432. January 31, 1888. Carding engines. J. E. PLATT, Hartford Works, and W. H. RICHARDSON, Bank View, Derber, both in Oldham.



Casings.—Relates to means for adjusting the casings beneath the cylinder, and taker-in. The two

