

THE KIDDERMINSTER CARPET TRADE.

There is still an unevenness about business in this district, so far as Brussels manufacturers are concerned. Some firms speak of being busy, whilst others, although busier than for some months past, still find cause for serious complaint, and experience much difficulty in securing sufficient orders to keep their looms fairly at work. A large quantity of goods are now going into consumption, and this is appreciably affecting consignments, which up to the present this month have been exceedingly heavy, and shew a marked increase when compared with February. During the past fortnight the trade has been visited by a number of buyers who usually prefer to buy on the spot rather than from the patterns carried by the firms' representatives, and in many directions order books have derived considerable benefit from the calls which have been made. The general condition of the trade is looked upon as healthy, and there is no reason to think otherwise than that a good summer trade is in front.

There is no change in the tapestry branch; business continues limited, although perhaps up to the average. In the Axminster and rug trades machinery is well employed, and in several instances extreme pressure exists.

There is but little change to report in the condition of the wool market. Prices for some sorts are firmer, but for others values are a shade easier. Transactions continue light, and the turnover is much below what it should be at this period. In the worsted yarn trade there is more business moving, but orders in the main are small. The unsatisfactory state of the wool market continues to exercise a severe check upon operations in this branch. Prices of spun yarns are pretty firmly adhered to, as spinners say they are too keen to enable them to make concessions.

Cotton yarns are firm, and stand at a high figure. As contracts fall manufacturers prefer to go on from hand to mouth rather than place new contracts at present rates, as they do not think they can be long maintained.

Joint Stock and Financial News.

NEW COMPANIES.

TAYSIDE FLOORCLOTH CO., LIMITED.

Established to carry on at West Shore, Newburgh-on-Tay, the manufacture of floorcloth, table baize, etc.; capital, £10,000, in 2,000 shares of £5 each.

FRED. WILKINSON, LIMITED.

Registered with a capital of £10,000, in £5 shares. Object, to acquire the cotton spinning mill known as Crossfield Mill, Rochdale. The first directors are Frederick Wilkinson, 13, India-buildings, Cross-street, Manchester; P. G. Banton, Corporation-street, Manchester; A. Cowling, Marshfield Mills, Bradford; and A. H. Stott, jun., Haworth's-buildings, Manchester. Qualification, £50. Remuneration to be determined in general election.

HOLLINGRAKE AND CLEGG, LIMITED.

Registered with a capital of £90,000, in £10 shares. Object, to carry on the business of spinning, weaving, manufacturing, buying, selling and dealing in wool, cotton, silks, &c., &c. First subscribers: Shares. C. Clegg, Clapton Lodge, Halifax 1
W. H. W. Harrison, 26, Highfield-terrace, Halifax 1
W. Craif, 38, Park-view, Halifax 1
W. Parratt, 343, Queen's-road, Halifax 1
T. W. Benson, 43, Craven-terrace, Halifax 1
W. Thomas, 7, West-view, Halifax 1

There shall not be less than three directors. The first are George Clegg, John Thomas, and Henry Whiteley Harrison. Qualification, £1,000. Remuneration to be determined in general meeting.

THE CASTLE SPINNING COMPANY, LIMITED.

Registered with a capital of £100,000, in £5 shares. Object, to carry on the businesses of spinning, weaving, doubling, bleaching, dyeing and printing of cotton, flax, wool, jute, silk, etc. First subscribers: Shares. W. Thackeray, Mottram-road, Stalybridge 1
A. Keefe, Sett-street, Stalybridge 1
M. Reece, Mottram-road, Stalybridge 1
O. Hibbert, Brookbank, Godley 1
J. Ridyard, High Bank, Stalybridge 1
W. Conway, Mottram-road, Stalybridge 1
J. A. Newton, Mottram-road, Stalybridge 1
E. Leach, Millbrook, Stalybridge 1
W. T. Watts, Acres-lane, Stalybridge 1

There shall not be less than five nor more than seven directors; the first to be appointed by the subscribers to the memorandum of association. Qualification, holding shares. Remuneration to be determined in general meeting.

THE NEW MILL COMPANY, IDLE, LIMITED.

Registered with a capital of £8,000, in £10 shares. Object, to acquire the business carried on at Idle, West Riding, Yorkshire, under the style of the New Mill Company, Idle. There shall not be less than nine nor more than twelve directors. Qualification, £80. Remuneration, £1 per week, divisible.

TEMPLETON ASBESTOS MINING COMPANY, LIMITED.

Registered with a capital of £25,300 in 2,500 ordinary shares of £10 and 390 founders' shares of £1 each. Object, to acquire asbestos mines, mining rights, and land containing, or likely to contain, asbestos in the township of Templeton, Quebec, and with a view thereto to carry into effect an agreement made between Carl Koenig and the company. The first subscribers are:— Shares.
R. Wissmann, Sonnenbink, Overhill-road, 5
Dulwich 5
J. Werner, Maytree, Richmond 5
C. R. Hammer, 3, East India-avenue 5
E. Schwaite, 3, East India avenue 5
C. Koenig, 5, Creechurch-lane, E.C. 5
H. Meyer, 55, and 56, Threadneedle-street .. 5
M. J. Rikoff, 28, Throgmorton-street 5

There shall not be less than three nor more than seven directors; the first to be appointed by the subscribers to the memorandum of association. Qualification, £50. Remuneration, £25 each and one-tenth of net profits after 10 per cent. dividend.

J. M. KIRK AND SONS, LIMITED, HALIFAX.

Registered on the 26th ult., with a capital of £20,000, in £10 shares, to acquire the business carried on at Halifax under the name of J. M. Kirk and Sons, to adopt an agreement mentioned in clause 3 of the articles, and to carry on the business of dyers, finishers, cleaners, etc. The subscribers are:— Shares.
*J. Booth, Halifax, manufacturer 1
L. Clayton, Halifax, silk spinner 1
C. Holdsworth, Halifax, manufacturer 1
H. H. Bowman, Halifax, cotton spinner 1
T. Huntriss, Halifax, solicitor 1
T. Ramsden, 19, North Castle-street, Halifax 1
B. Crapper, 32, Park-street, Halifax 1

The regulations of table A mainly apply. The number of directors is not to be less than nor more than five, the first being J. Webster, in addition to the subscribers denoted by an asterisk. Registered office, Old Lane Dyeworks, Halifax.

THE KING STREET ROPERY COMPANY, LIMITED.

Registered by George E. Mellor, 28, Clegg-street, Oldham, with a capital of £6,000, in £5 shares. Object, to carry into effect an agreement made February 27th between James Milne and John Edward Milne, of the one part, and Samuel Taylor, on behalf of the company, of the other part, for the purchase of the business of a rope, twine, and banding manufacturer, now carried on at King-street Ropery under the style of J. and J. E. Milne. There shall not be less than four nor more than five directors. The first are George Mellor, Samuel Clough, Charles McLaren, William Butler, and John Illingworth. Qualification, 25 shares. Remuneration to be determined in general meeting.

LEA, LIMITED.

Registered by Johnson and Co., Birmingham, with a capital of £140,000 in £10 shares. Object, to acquire the businesses of a wool factor and worsted spinner, carried on by Thomas Lea, at Kidderminster and Bridgnorth. The first subscribers are:— Shares.
G. H. Lea, 15, Old-square, Lincoln's-inn 1
T. S. Lea, The Larches, Kidderminster 1
W. H. Talbot, Church-street, Kidderminster 1
G. Taylor, Bracebridge House, Kidderminster 1
A. Butcher, Summer-bank, Kidderminster.. 1
C. S. L. Briscoe, Arch-hill, Kidderminster .. 1
A. H. Gibson, 39, Bennett's-hill, Birmingham 1

The first managing directors will be George Taylor and Co., butchers; first ordinary directors, Thos. G. H. Lea and T. S. Lea. Qualification: Managing directors, 100 shares; ordinary directors, 50 shares. Remuneration: ordinary directors, £400, divisible.

JAMES GREENWOOD AND SON, LIMITED.

Registered with a capital of £35,000, in £10 shares. Object, to acquire the business carried on at Holme Mill, Hollins Mill-lane, Sowerby Bridge, of woollen manufacturers and cotton spinners carried on there, and for such purpose to carry into effect an agreement, made March 2nd, between Joseph Greenwood and Charles Smith. First subscribers:— Shares.
J. Smith, Sowerby Bridge 1
C. Whiteley, Sowerby Bridge 1
J. Greenwood, Sowerby Bridge 1
T. Hoey, Sowerby Bridge 1
W. Dixon, Clough Head, Norland 1
C. Firth, Sowerby Bridge 1
G. Rhodes, Halifax 1

The first directors are the first three subscribers to the memorandum of association. Qualification, 10 shares. Remuneration to be determined in general meeting.

Gazette News.

PARTNERSHIPS DISSOLVED.

W. D. Coddington and Sons, Chorlton-street, Manchester, and elsewhere in Lancashire, cotton spinners, C. J. Spencer Brothers, Hope Works, Barnsley, bleachers, etc.

Neal Brothers, Friday-street, Leicester, trimmers and bleachers.

John Booth and Son, Charlesworth, Derbyshire, cotton banding manufacturers; by the death of George Booth.

Rawstron and Co., Albion Mill, Helmsore, Lancaster, cotton manufacturers.

Riley, Priestley, and Co., Hopwood-lane, Halifax, coating manufacturers.

ADJUDICATIONS.

Edward Warcham and Joseph Hargreaves, Adelaide-street, Bolton, cotton cloth manufacturers.

John Smith, Mearclough Mill, Sowerby Bridge, woollen manufacturer.

RECEIVING ORDER.

Joseph Collins, St. John's-road, Huddersfield, cotton spinner; Huddersfield.

NOTICE OF DIVIDEND.

R. L. Addyman, trading as Addyman and Co., Stansfield Mill, Kirkstall-road, Leeds, and residing at 7, Olive-grove, Leeds, cloth finisher; 5s. 9d., first.

Patents.

SPECIFICATIONS PUBLISHED.

1890.
2,296. RICHARDSON AND HOLLAND. Production of caustic soda, etc. 8d.
3,725. LAKE (*Muller and others*). Artificial horse-hair. 4d.
3,749. BLAKELEY AND BEVING. Ornamenting textile fabrics. 4d.
4,049. CALVERT. Twine. 11d.
4,463. PACKER. Producing spots upon lace, etc. 4d.
5,041. BUCKLEY. Mules and twiners. 6d.
5,271. SALEHA. Cleaning and separating cotton from seeds. 6d.
5,508. HADDEN. Knitting seamless stockings. 8d.
6,445. SMITH. Tension pulleys of spinning etc., machines. 6d.
21,230. BARKER. Figured pile-fabrics. 8d.
2,762. BANCROFT. Transit frames for pile fabrics. 8d.
2,850. STOTT. Sectional warping, etc., machines. 8d.
3,962. MARCHETTI AND CROSSLEV. Printing yarns. 11d.
4,050. TATTERSALL. Humidifying the air of factories, etc. 8d.
5,033. PHILBURN. Flyers for spinning machinery. 6d.
5,289. ADAIR. Scutching and rippling flax, etc. 6d.
1891.
30. DOWNING (*The Morton Safety Heating Company*). Heating apparatus. 8d.
583. DURAND and others. New colouring matters. 4d.

AMENDED SPECIFICATION.

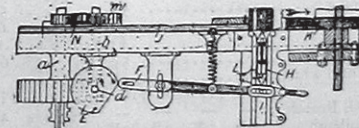
1888.
10,205. DE PASS (*Imbs*). Spinning machines. 8d.

REPRINT (with alterations).

1890.
446. FISHER. Carpets. 6d.
- SECOND EDITION.
1881.
4,899. IMRAY (*Koehlin*). Colouring matters. 4d.
1882.
549. THOMAS. Bleaching. 6d.
1890.
3,095. LEIGH (*Williams*). Colouring matters. 6d.

ABSTRACTS OF SPECIFICATIONS.

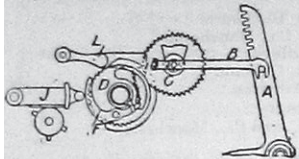
14,684. September 18, 1886. **Looms.** J. TELFORD, 25, Emmett-street, Miles Platting, Manchester.



For weaving wire webs by power the driving shaft *a* is geared with a shaft *b* which operates upright shafts *d* through bevel gearing. Tappets *E* on the shafts *d* act against bowls on the spring picking levers *F* by which the shuttle is operated. The shafts *d* are each geared at their lower ends with a horizontal shaft. The shuttle *H* is of cast metal of great thickness, and the trap *I* is

made as a square groove in a true planed iron box; one side is loose to suit the square of the shuttle, and a sliding spring block serves to hold the latter. The lay is operated on the horizontal frame side by quadrant levers N acting against bowls on rods J. The lay is returned by springs. The web is taken up between two wooden rollers K geared together. The warp wires are let off from un-ended bobbins slipped on to a spindle of the number required. 84d.

14,704. September 18, 1889. **Looms.** W. A. and D. CRAMER, Woose Brow-road, Windhill, Shipley.



Dobby.—The jack levers A are operated through rods B from crank wheels C. The latter are turned at times by segment-wheels D loose on a shaft with which they are made fast, according to the pattern, by spring levers F; these levers have projections at their ends, which enter a key groove in the shaft, or in a sleeve thereon when not kept clear of the same by the action of the setting levers J. A rising and falling bar L, worked by a cam, engages with flanges on the wheels D, to lock them until required to move. The concave part of the wheels C fit the plain parts of the wheels D when at rest.

Change-box motion.—Wheels C, D, as above described, are arranged to act through levers and a chain on the box-rod. Spring catches lock the wheels D in position.

Picking motion.—The picking tappets are put in and out of action by lever and link connections with a wheel C. 84d.

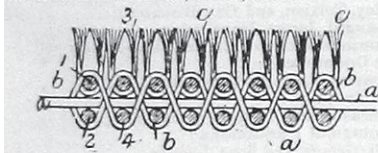
14,724. September 18, 1889. **Looms.** A. SNOECK, Ensaival' Belgium.

Jacquards.—The jacquard mechanism is supported on two cross frames resting on the shortened side frames of the loom. The cards are carried by four brackets fixed to two hand-rails. A metal platform, accessible by means of steps, is secured to the frames, and serves to strengthen them. 84d. Drawings.

14,751. September 19, 1889. **Treating Fabrics.** J. SMITH, 41, King-street, Batley.

For imparting solidity and a permanent finish, a softness and an evenness necessary for the dyeing process to woollen, worsted, hack-worsted, unions, and other woven fabrics, they are passed to and fro through a "wee-gee," containing water or other liquid in a boiling state. 64d. Drawings.

14,756. September 19, 1889. **Pile carpet fabrics.** H. MULLERS and A. SPINDLER, Dulkan, Prussia



Cut pile carpeting is woven in the manner shown, with ground warps b, pile warps c, double weft picks 1, 2, 3, and a central warp a under considerable tension. Picks 1 and 2, 3 and 4, etc., are inserted simultaneously by the use of two shuttles in the loom, each double pick being followed by the insertion of the pile wire beneath the pile warp c. The warp a acts as a path for the upper shuttle. A modification is described in which the pile warp is bound in by two weft picks. 64d.

14,775. September 19, 1889. **Looms.** S. FIELDEN, Stansfield Cottage, Todmorden.

Pickers, connecting picking straps to.—The strap is attached to a pivoted link or swivel piece detachably connected to the body of the picker and being below the spindle hole. Various forms of links and methods of connecting them to the picker are described. 64d. Drawings.

14,802. September 19, 1889. **Knitting.** W. H. REVIS, A. BREWIN, and J. MARRIOTT, Goldsmith-street Works, Nottingham.

Straight-bar machines.—In making single course stripes, the shut-boxes are returned to their initial position immediately after drawing a course, and whilst the machine is dividing and knocking over the loops. The Provisional Specification describes also means for making two parallel rows of narrowings on each side of the foot of hose or half-hose, each pair of narrowings terminating in a point. 84d. Drawings.

14,810. September 19, 1889. **Knitting.** J. H. WOODWARD, Lee Works, Nottingham.

Straight-bar machines.—To facilitate the automatic fashioning of "Gardigan" facets, three pairs of separate and independent narrowing slides control the traverse of three pairs of independent sets of narrowing points. 1s. Drawings.

14,859. September 29, 1889. **Blankets, etc.** T. TAYLOR, Bolton.

Bath blankets or wrapping sheets are woven with a worsted or woollen pile on a ground of cotton or cotton and linen. 4d.

14,874. September 20, 1889. **Embroidery.** G. L. MICK, M. KURSTEINER, and E. JANENS, 15, Rue de Richelieu, Paris.

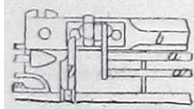
An embroidering machine of the Swiss type is provided with means for printing designs on the work.

The printing devices are arranged in sections, in each of which several printing blocks are secured on a plate carried by arms, pivoted on a carriage. Details are specified. 1s. Drawings.

14,905. September 21, 1889. **Spinning.** W. PHELON, Heaton-street, Cleckheaton.

Carding-engines.—A machine for cutting ring spaces in the card clothing on doffer cylinders. 64d. Drawings.

14,908. September 21, 1889. **Looms.** G. C. E. P., C. D., and W. R. W. TYLER, Mount Gernos House, and W. DAVIS, all of Llanfyllsi, Cardiganshire.



Shuttle guards.—A pair of rods or rails a are secured to end arms which are hinged on the lay cap b. The guard thus formed is put in and out of position by the action of the stopping and starting gear of the loom. Hinged hooks may be arranged to hold the guard up when raised, notwithstanding stoppage of the loom. Guide plates l on the shuttle board stop the shuttle, or direct it into the boxes, in the event of its being displaced between the guard and the boxes. 84d.

14,925. September 21, 1889. **Twist Lace Machines.** W. SNOWMAN, Denmas-street, Bradford, Nottingham.

Bobbin Carriage.—The bottom or ground part is bevelled on one or both sides from the lower edge to about half its depth,

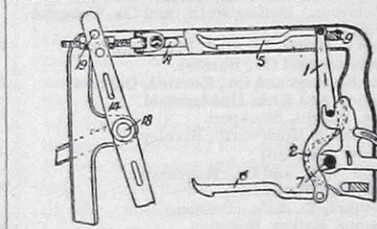
in order to allow two carriages to pass through any gate in the combs without material damage to either. 64d. Drawings.

14,960. September 23, 1889. **Spinning, etc.** W. C. BURTON, Kew, Chelsea, London, near Waterloo.

Spindles, etc.—Within the lobster casing is fitted a spring-bolster or luff formed of a piece of wire or ribbon coiled spirally. The spindle is held down by means of a split ring, which springs into a groove on the inner surface of the wulver, and takes also into a groove in the bolster case. The invention is applicable to mules, throslates, ring frames, etc. 64d. Drawings.

15,036. September 24, 1889. **Looms.** M. SOWDEN, Sowden's Loom Works, Shipley.

Dobbies.—The baulk levers 1 are curved or recessed at 2 to admit of the fulcrum 7 of the jack levers being situated as shown. The latter may thus be made shorter and lighter than usual. The fulcrum bars 9 are inclined, or are formed with steps or recesses of varying depths, so that the draw hooks 5, 6 may be recessed or may be set in to prevent lateral motion of the draw-hooks and baulk levers. The draw knives 8 are made to traverse further at one end than at the other by arranging the joints 19 on



the levers 14 at different distances from the fulcrum 18. Antifriction bowls on the knives 8 guide and steady the latter. Recesses in the knives for preventing lateral motion of the hooks engaging therewith. 84d.

15,046. September 24, 1889. **Looms.** E. HAWCORTH, 51, Stanley-street, Nelson, Lancashire.



Shuttles.—The heel of the tongue is mounted on the usual pivot pin B, and fits in a guide formed with cross bars C, D, by which the heel is steadied. The pin B passes through holes in the sides of the frame, and holds the latter in position. The spring E is employed as usual. 84d.

15,047. September 24, 1889. **Spinning.** J. V. EVES, Brooklands, Knock, Down, Ireland.

Spindles, etc.—The bobbin takes over a loose ring which rotates with it, is preferably flanged, and may be formed in various ways of metal, wood, or other suitable material. 64d. Drawings.

15,059. September 24, 1889. **Tearing, etc., rags.** T. JACKSON, Ravensthorpe, near Mirfield.

Swifts or drums used in machines for tearing, pulling, or grinding rags, are formed of an external shell A provided with taper holes into which the teeth g are driven from the inside, the inner drum B, which is preferably made expandable to facilitate its removal for the renewal of the teeth, etc. The drum B is shown made in segments connected together by right and left-handed screw couplings e, and the spokes c being loose in the boss c, the drum may be expanded or contracted by operating the screw coupling e. The boss c is also formed in sections secured together by bolts. In a modification the rim B is in one piece slit transversely to allow of slight expansion and contraction, and the boss c is solid and is provided with radial holes into which take the screwed ends of the spokes e, the latter being provided with nuts by which they may be adjusted radially. The inner drum may also be made to fit exactly the shell A, and be secured to it by bolts, etc. The shell A may consist of a series of metal lags secured by encircling metal hoops, etc. 84d.

15,129. September 25, 1889. **Knitting.** J. W. LAMB and J. NOON, Nottingham.

Straight-bar machines.—Zig-zag or other irregular striping is produced by controlling the thread-carriers by pattern slides, which a progressive motion is imparted either in the same or in opposite directions, for the purpose of shifting the field of traverse of such carriers, or of enlarging and contracting the length of their traverse. 1s. Drawings.

15,135. September 25, 1889. **Treating esparto grass.** J. E. RICHARDSON, Coathill Hill, Alston, Carlisle.

A process for treating esparto grass to adapt it for use in the manufacture of carpets, matting, twine, and the like, and consisting in first softening the grass in a bath of water, caustic soda, hydrochloric or sulphuric acid. The grass is then thoroughly washed and drained, and passed through rollers to press out the superfluous moisture. It is then beaten with wooden beate s, passed through fluted and then through plain rollers, and after carding it is ready for being spun into yarn, etc., or woven into carpets, matting, etc. The carpet, etc., when completed, is preferably finished by passing through hot polished rollers or by sizing. 4d.

15,153. September 26, 1889. **Washing wool, etc.** W. EASTWOOD, 31, Great George-street, Leeds, and A. AMBLEK, Holling's Mill, Sunbridge-road, Bradford.

Relates to a method of an apparatus for washing wool and other textile fibres, and clothes, wherein the use of propelling rakes is dispensed with. Consists in feeding the material 8 into a bowl, which inclines slightly towards the squeezing rollers, and over which is a perforated trough operated so as to rise and fall and reciprocate toward and away from the rollers by means of eccentrics. The wool is thus intermittently squeezed and fed forward by the trough. The water draining from the bowl falls into a tank, divided for the purpose of separating impurities from the liquor, before its return by a pump to the trough. 1s. 2d. Drawings.

15,170. September 26, 1889. **Looms.** F. H. GOSLING, George-lane, Bredbury, Cheshire.

Drop-box motions.—In the Shaw and other motions for check looms the pattern cylinder is mounted on an angle-lever, which turns on a stud, and is operated from a grooved cam through a forked rod. A spring keeps a pin in the fork. When the loom is stopped on the failure of weft, etc., a pivoted rod, worked by a rod in connection with the setting-on rod, comes beneath the

angle-lever, and thus checks the motion of the cylinder. 84d. Drawings.

15,175. September 26, 1889. **Sulphonic acids: dyes.** O. ISIRAY, Southampton-buildings, London.—(The Farbwerke vorm. Meister, Lucius, and Bruning, Germany.)

Relates to the production of amido-oxynaphthalene disulphonic acid and amido-dioxy-naphthalene monosulphonic acid, their diazo compounds, and azo colouring matters therefrom. The amido-oxynaphthalene disulphonic acid is obtained by heating beta-naphthylamine to 230°-250° C. with caustic soda at 250°-260° C. The melt is dissolved in water, strongly acidulated with hydrochloric acid, and left for the acid sodium salt to crystallise out. The amido-dioxy-monosulphonic is obtained by heating the former product with caustic alkali at 240°-250° C., and treating the melt in a similar manner. Nitrous acid converts these products into azo compounds, which furnish azo colouring matters. For example, when added to a solution of beta-naphthol in ammonia, the diazo compound obtained in the usual way from amido-dioxy-naphthalene monosulphonic acid forms an azo dye which is completely separated by common salt. The amido-oxynaphthalene disulphonic acid may also be caused to react upon diazo or tetrazo compounds with the production of azo dyes varying in shade from black violet to blue black. 64d.

15,176. September 26, 1889. **Sulphonic acids: dyes.** O. ISIRAY, Southampton-buildings, London.—(Farbwerke vorm. Meister, Lucius, and Bruning, Germany.)

Relates to the production of amido-naphtho sulphonic acids from the beta-naphthylamine disulphonic acid R and Y, of their diazo compounds and of azo colouring matters therefrom.

Sulphonic acids—Beta-naphthylamine disulphonic acid R or Y is mixed with caustic soda, and a little water, and heated slowly to 230°-250° C. and subsequently at 250°-260° C. The melt is dissolved in water and saturated with hydrochloric acid, and the new acid crystallises from the hot solution. On treating the sodium salt with hydrochloric acid and sodium nitrate the diazo compound separates as a red orange powder.

Azo dyes.—The diazo compounds of the new acids combine with phenol, aniline, and their sulphonic acids to form azo dyes, of yellow, red, and brown shades. The Y acid yielding bluer shades than the R acid. The new acids may also be combined with diazo or tetrazo compounds, producing azo dyes varying in shade from black violet to blue black. 64d.

15,203. September 27, 1889. **Bollers.** R. GOODBODY, Upton, Clara, King's County, Ireland.

Incrustation.—In order to form an easily removable soft deposit, in place of a hard and stony incrustation, a hydrocarbon is injected with the feed water. The hydrocarbon for this purpose may be either a natural product, the residuum of the distillation of natural hydrocarbons, or the product of the distillation of schists or minerals yielding hydrocarbon oils. 4d.

15,206. September 27, 1889. **Spinning.** J. MCFERRAN, Barnagecha, Fort William Park, Belfast, and J. B. PIERRE, Green Edge, Carrickfergus, Ireland.

Wet spun yarns of flax, etc., are wound during spinning upon thin flexible tubes of paper, etc., which take on to the bobbins, and may be removed therefrom after drying. The dried yarn may then be reeled, woven in the loom, or otherwise unwound from the flexible tubes. 4d.

15,264. September 28, 1889. **Webbing for embossing.** T. BOVD, Victoria Mills, Holbeck, Leeds.

Webbing for use in the process of embossing woven, knitted, and felted fabrics, is woven with flowers or other curvilinear figures or designs by the employment, in a jacquard or other harness loom, of a ground warp, a stitching warp, and coarse and fine wefts, all of cotton. The ground warp is shed in the ordinary way, whilst the stitching warp keeps down the thick weft on both faces, whereby the figures are formed. 4d.

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