

THE KIDDERMINSTER CARPET TRADE.

After the somewhat long holiday and the indulgencies by common consent allowed at Christmas time, business this week could hardly be expected to run with its wonted smoothness in this or in any other industry. Throughout the district carpet works and spinning mills were closed until Monday morning, and in one or two instances, in consequence of stock-taking and unfinished repairs to machinery, doors of the former were not opened until as late as Thursday. But for orders already on the books and orders for goods down for delivery on the 1st of January, manufacturers may have kept their looms at play the whole of the week, as new business has been practically nil; as it is, scarcely any work has been done, with the exception of that absolutely necessary to do, and machinery everywhere has been running most irregularly. By next week things will have got into their proper groove again, a large number of the firms' travellers will take to the "road" to resume their journeys, and it is safe to say that the second stage of the spring season will be entered upon with earnestness and confidence. It is of no use denying the fact that up to the present business this season has been disappointingly backward, indeed, it would not be far wide of the mark to say that not many more than one half the usual number of orders have been booked. The principal reasons assigned for this are the advanced price list issued right at the beginning of the selling season and the subsequent depressed state of the wool market, and consequent gradual decline in values. The weakness of the wool market has, of course, been the main obstacle. So long as raw material kept firm there was not much the matter, business was opening out very well, and the outlook was regarded by everyone as favourable, but the moment the wool market exhibited signs of weakness buyers commenced to cut down their purchases almost to their actual wants, and all weighty business was deferred to the new year. It is quite expected that in consequence of this orders will now come in rapidly, and that about six months work will be crowded into the next two or three. Should this take place it is feared that in the manufacturers' attempt to accomplish this the question of overtime must be pushed forward for definite settlement; as it stands at present it is not satisfactory to the employers, and a good many of the weavers have not failed to express dissatisfaction with the resolution recently passed by their Association.

Joint Stock and Financial News.

NEW COMPANY.

D. AND D. H. FRASER, LIMITED.

Registered by Waterlow and Sons, Limited, London-wall, with a capital of £120,000 in £10 shares. Object, to commence, establish, acquire (by purchase or otherwise), conduct and carry on the business of general and commission merchants and warehousemen in England, the colonies, or elsewhere; to import and export all kinds of woollens, cottons, silks, etc. The first subscribers are:—

D. H. Fraser, Wepner, South Africa.....	1
D. Fraser, Newport Pagnell.....	1
A. Fraser, Westfield House, Ipswich.....	1
E. Titchmarsh, Ipswich.....	1
J. F. Titchmarsh, Ipswich.....	1
W. B. Roche, Ipswich.....	1
J. L. Ensor, Ipswich.....	1

There shall not be less than three nor more than five directors. The first are D. Fraser, D. H. Fraser, C. D. Cowen, J. A. Nash, and J. W. Roche. Qualification, 200 shares. Remuneration, £50 each. D. H. Fraser is appointed manager-in-chief, with a remuneration of £1,000 and a further £300 after 12½ per cent. dividend.

Patents.

SPECIFICATIONS PUBLISHED.

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

Where Complete Specification accompanies Application an asterisk is suffixed.

19,773.	1889.	TRUMAN.	Treating hemp, flax, etc.	4d.
20,021.		COUTURAT.	Knitting frames.	8d.

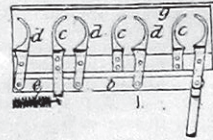
1,260.	1890.	WHITWORTH.	Revolving flat carding engines.	8d.
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- 1,364. EDWARDS (*G. Joseph's successors*). Fleece dividing machinery. 8d.
- 1,579. IMRAY (*Société Anon. des Matières Colorantes de St Denis and others*). Making azo-amines. 6d.
- 1,585. MATTOCK, W. and T. Looms. 8d.
- 1,699. IMRAY (*Farbwerke vorm. Meister, Lucius, and Bruning*). Colouring matters. 4d.
- 1,016. LINDSAY, J. and R. Looms. 8d.
- 2,090. COOPER and others. Cardigan jackets, etc. 6d.
- 2,121. FOX and WADE. Looms. 8d.
- 2,499. LAKE (*Oehler*). Cotton dye-stuff. 4d.
- 16,137. BUTTERWORTH, J. and G. F. Cloth straightening apparatus for bleaching, etc., machines. 6d.
- 16,967. NICHOLSON and HALL. Doubling and throwing silk, etc. 6d.
- 17,085. WOOD. Guide eyes for spinning frames. 6d.

ABSTRACTS OF SPECIFICATIONS.

11,608. July 20, 1889. **Kn tting.** J. LANGHAM, Causeway-lane, Leicester.
Wool-machines—thread carriers.—In addition to the hole for the ordinary thread, a curved hole is formed to feed a thread of inferior quality so that it always lies behind and is hidden by the thread passing through the usual hole. According to the Provisional Specification the same result may be accomplished by two thread-carriers acting in conjunction with stops. 6d. *Drawings.*

11,627. July 22, 1889. **Spinning, etc.** H. RAWCLIFFE, Lower House, Burnley, and J. EASTWOOD, Throstle, Burnley.
Doffing arrangements.—A number of bobbins, etc. are doffed simultaneously by means of a series of clips, consisting of fixed jaws *c*, and movable jaws *d*, connected by a link *k*. The clips are normally kept either open or closed by means of a spring *e*, and suitable handles are provided; *g* is a rod or wire for preventing the yarn from becoming entangled with the jaws. For holding the yarn during doffing a wire, hinged to the ring rail, and normally hanging in front of the spindles, is employed. When the bobbins are ready to be doffed, the wire is turned over the points of the spindles to the back of the same, carrying with it the yarn, and holding it during the doffing operation. 8d.



11,642. July 22, 1889. **Twisting yarns.** D. R. MALCOLM, Constable Works, Dundee.
The delivery bobbin.—The threads from them are guided through an aperture in the axis of a revolving frame or flyer. The threads are then passed over guides and returned again to the axis of the flyer, and taking over pulleys by which they are drawn from the delivery bobbins, they are passed over guides to a receiving bobbin. The combined threads by this means receive two turns of twist for each revolution of the flyer. Details of driving are given. The invention is specially applicable for twisting jute, flax, hemp, etc. 8d. *Drawings.*

11,653. July 22, 1889. **Knitting.** H. S. LONG, 2,043, Coral-street, Philadelphia, U.S.A.

Fashioning.—The needles for forming heels and toes are put in and out of action for widening and narrowing by means of two or four slides working in a line. The end needle engages with a pin, and raises the slides until the pin is pressed into a recess by a spring, after which the needle ascends to the idle position. The slides are moved down again into position by spring arms on tappet blocks which are rocked by arms engaging with studs.

Driving-mechanisms.—Motion is transmitted from treadle mechanism by chain and sprocket gearing and a spring clutch, and two machines may be operated together.

Stop-motions.—The clutch is thrown out of action either when a weight or a fabric engages with brackets on a vertical sliding rod, or when a knot, or fault in the yarn, which passes through an eye at one end of a pivoted lever, operates a system of levers with the aid of a weight. 8d. *Drawings.*

11,666. July 22, 1889. **Dyes.** O. IMRAY, 23, Southampton Buildings, Chancery-lane, London.—*Farinosee vorm. Meister, Lucius and Bruning's Flackel.*
Relates to the preparation of derivatives of flavopurpurine. By the action of nitric acid upon flavopurpurine, two nitro derivatives are obtained, viz., alpha-nitroflavopurpurine when sulphuric acid is also used, and beta-nitroflavopurpurine when glacial acetic acid or other indifferent solvents, such as hydrocarbons, etc. are present. The beta product is an orange-red colouring matter, dyeing alumina mordanted fabrics a yellowish-brown, and nitro-alizarine. It is prepared by heating flavopurpurine with glacial acetic acid to 30°–35° C., slowly adding nitric acid of 50 per cent. thereto, and further heating to 40°–45° C. for an hour. By reduction with soda lye and glucose, or other suitable means, it is converted into an amido-compound which is precipitated by addition of an acid. 6d.

11,716. July 23, 1889. **Spinning.** J. VAUGHAN and THE HURST MILLS, Co., Ltd., Ashton-under-Lyne.

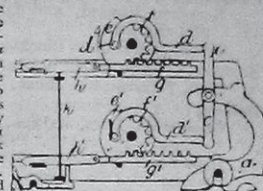
Stop-motion for carding engines.—The object is to stop the carding engine when the sliver passing through the calendaring rollers is either too thick or too thin, or falls altogether. The axle of the upper roller is prolonged, and carries a worm which, when the sliver breaks or becomes too thin, engages with a worm wheel that, by means of a link and a lever system, disengages the catch which supports the "doffer lever," allowing the latter to fall and disengage the driving-gear in the usual way. A similar arrangement may be used for stopping the carding engine when the sliver becomes too thick, but for this purpose an arrangement is preferably used consisting of a weighted lever, the long arm of which is normally held in a raised position above the sliver by the engagement of the shorter arm with a lever supported by the axle of the top roller. When the roller rises, owing to the thickening of the sliver, the lever is released, and falling, severs the sliver, when the engine is stopped in the manner above described. 6d. *Drawings.*

11,733. July 24, 1889. **Embroidering machines.** P. A. NEWTON, 6, Bream's Buildings, Chancery-lane, London. (*J. Irish, 201, Clinton Avenue, Connecticut, U.S.A.*)

A machine in which material carried by a moving frame is worked on by one or more needles, is provided with a jacquard mechanism to move the frame varying distances in different directions, and with automatic stopping gear. 2s. 1½d. *Drawings.*

11,762. July 24, 1889. **Looms.** J. CULPAN, Standing Stone, Luddendenfoot, Yorkshire.

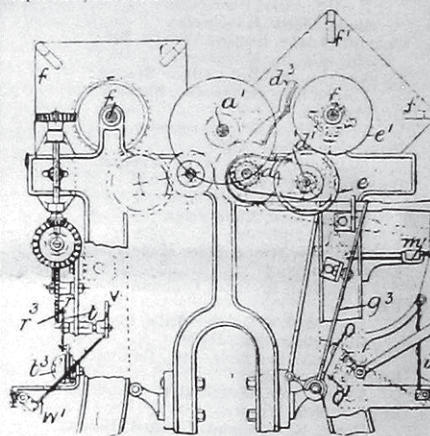
Dobbies.—To ensure a positive action of the heads in both directions the jack levers *a* carry levers *c*, to which are hinged the sickle rods *d* connected to studs *d* on the discs *e*, *c*, *e*, etc. The latter carry segment wheels *f*, *f* gearing with the rack portions *g*, *g* of the usual catches *h* *h*. The studs *d* are placed at distances from the centres of the discs which will produce an even shed. The studs stop at the positions of dead centre, and so lock the parts until a change is required. The Provisional Specification states that the ordinary needles *k* are replaced by cranked angled bars, which are held in position by the shaft of the rocking-lever. 8d.



11,795. July 24, 1889. **Dyes.** H. H. LEIGH, 22, Southampton-buildings, Chancery-lane, London. (*R. G. Williams, Albany, New York, U.S.A.*)

Azo dyes.—Relates to the production of azo colouring matters, which dye cotton without a mordant, from the alkylised acids of the orchella lichens, or compounds of the same. Consists in combining one molecule of a tetrazo compound with two molecules of the above acids, or in first combining one molecule of a tetrazo compound with a phenol, or amine, or sulpho, or carbo acid thereof, and then combining this intermediate product with one molecule of the above acids, thus producing mixed azo dyes. The tetrazo compounds used are those of diphenyl, ditolyl, naphthalene, stilbene, fluorene, diphenol ether, azo-benzol and its homologues, and oxydiphenyl. The amines and phenols used are the sulpho acids of the naphthylamines, naphthols, mono-ethylaniline and diphenylamine, and salicylic acid. For example: benzidine and the methylated lichen acids yield a fine scarlet dye; tolidine, *alpha*-naphthylamine monosulpho acid, and methylated lichen acid yield a shade like benzo-purpurine 4 B. 6d.

11,820. July 25, 1889. **Spinning.** E. RUSHTON, Royal Depot Mills, Macclesfield.



Reeling machines.—The reel is driven through a clutch box on the shaft *f*, which is driven from the shaft *a* through friction wheels *e*, *e*, and spur gearing, one axle *d* of which is carried by a swing link *d* turning about the axle *e* and operated so as to place the wheels into and out of gear by means of a spring handle *g*. The axle *e* also carries a brake *d*. Normally the handle *g* is supported in the raised position by a catch. The yarn from the bobbins is passed over suitable guides, several times round a detector or faller wire *i* through a guide on the reverse bar and on to the reel *h*. When a thread breaks the faller wire *i* falls into the position shown in dotted lines, and into the path of an oscillating beater *a* driven from the shaft *f*. On the axle of the beater is a clutch box, the movable part of which, when the beater is stopped, is moved sideways on the axle, and by means of a lever *g* moves from its catch the handle *g*, which falls and disengages the friction wheels *e*, *e*, and brings the brake *d* into contact with the wheel *e*. In order to stop the reel, when a required length of yarn has been reeled, a disc *r* is employed, which is driven through worm and gear gearing at such a rate that it makes one revolution for the length of yarn required in a skein. The disc *r* carries a stud *z*, which, in its lowest position, engages with a lever *t*, the other end of which engages with the spring handle of a bell *z*. On the axle of the lever *t* is a quadrant *v*, and a spur gear *v*, and the stud upon it rotates the quadrant *v* slightly, allowing the faller wire *W* to fall, when the machine is stopped in the manner previously described. The invention is particularly applicable to machines for reeling silk. 8d.

11,837. July 25, 1889. **Knitting comforters, etc.** R. HADDAN, 18, Buckingham-street, Strand, Middlesex. (*L. Richelbourg, Tounerre, Yonne, France.*)

The wells are made at the sides of the fabric, and the direction of the knitting is along the length instead of the breadth. The fabric is made loose by putting certain of the needles out of action by means of a comb, operated by cam levers from a bracket on the cam carriage, and by springs. 8d. *Drawings.*

PATENTS.
W. P. THOMPSON & CO.

Agents for procuring Patents and Registering Trade Marks and Designs.
6, Bank St. (Exchange), Manchester,
6, Lord St., LIVERPOOL; and 323, High Holborn, LONDON,
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