

FRANCE.		Rates of Duty.		English Equivalents.	
Tariff Classification in each Country.	Frs. Cts.	£	s.	d.	
Manufactures of wool, pure, unmixed:					
Cloths, casimirs, and other milled tissues, and short-napped tissues not milled:					
Stuffs for furniture, weighing more than 400 grammes to the square metre.....	100	100-00	Cwt.	2 0 8	
Moiré.....		50 00	"	1 0 4	
Other kinds, weighing to the square metre—					
400 grammes or less (½ lb. to the square yard)		140-00	"	2 16 11	
Above 400 grammes and up to 550 grammes inclusive (½ lb. to 1 lb. to the square yard).....		123-00	"	2 10 0	
More than 550 grammes (more than 1 lb. to the square yard).....		105-00	"	2 3 1	
Carpets:					
Tapestry carpets (moquette, boucle).....		45 00	"	0 18 3	
Velvet tapestry (moquette, velours).....		55-00	"	1 2 4	
Eastern.....		186 00	"	3 15 7	
From Jacquard looms, chenille carpets, and others (Brussels, Wilton, Kidderminster, Axminster, etc.).....		80 00	"	1 12 6	
Hosiery of pure wool:					
Gloves, and articles of clothing not fitted.....		524-00	"	10 13 0	
Other kinds, cut out and without seams.....		120-00	"	2 8 2	
Other kinds, shaped, or with the foot shaped.....		242 00	"	4 18 4	
Haberdashery, fringe-makers' wares, tapes, and ribbons.....		200 00	"	4 1 3	
Fez caps and "bonnets rouge".....	Each	0-35	Each	0 3 ½	
Hangings (tapisseries).....	100 kilos.	500-00	Cwt.	10 3 3	
Shawls, broché or figured, other than Indian cashmere and tartans.....		320-00	"	6 10 1	
Tartans, not figured.....					
Containing from 25 per cent. to 50 per cent. of cotton.....		80-00	"	1 12 6	
Containing less than 25 per cent. of cotton, or wholly of wool.....		115 00	"	2 6 9	
Lace.....		300 00	"	6 1 11	
Velvets for furniture.....		180-00	"	3 13 2	
Bolting cloth, seamless.....		160-00	"	3 5 0	
Blankets.....		55-00	"	1 2 4	
List slippers and fur-lined shoes (called Strasburg shoes).....		87-00	"	1 15 4	
Cloth list.....		Free.	"	Free.	
Manufactures of wool mixed with other materials:					
Cloths, casimirs, and other milled tissues with cotton warp; also short-napped tissues, not milled, wool predominating; weighing to the square metre—					
200 grammes or less (0-37 lb. or less to the square yard)		140-00	"	2 16 11	
Above 200 grammes and up to 300 grammes inclusive (0-37 lb. to 0-55 lb. to the square yard).....		115-00	"	2 6 9	
Above 300 grammes and up to 400 grammes inclusive (0-55 lb. to 0-74 lb. to the square yard).....		90 00	"	1 10 7	
Above 400 grammes and up to 550 grammes inclusive (0-74 lb. to 1 lb. to the square yard).....		65-00	"	1 6 5	
Above 550 grammes and up to 700 grammes inclusive (1 lb. to 1-30 lb. to the square yard).....		50-00	"	1 0 4	
Above 700 grammes (above 1-30 lbs. to the square yard)		35-00	"	0 14 3	
Mixed Tissues, the warp being of floss silk, wool predominating in weight.....		240-00	"	4 17 6	
Carpets of wool mixed with other materials in whatever proportion.....		Pay as carpets of pure wool.			
Hosiery of wool mixed with other materials.....		As hosiery of pure wool.			
Other tissues of wool mixed with other materials, the wool predominating in weight.....		Pay as tissues of pure wool.			
Tissues of alpaca, llama, vicuna, and camels' hair, pure or mixed with wool; or mixed with other materials if the alpaca, llama, vicuna, or camels' hair predominates in weight.....		Pay as tissues of pure wool.			
Tissues of goats' hair, pure or mixed, manufactured in Europe.....		Pay as tissues of wool according to kind.			
Other tissues of hair (poils), pure or mixed with other materials, the hair (poil) predominating in weight.....	kilos.	100 80-00	Cwt.	0 12 2	
Ready-made clothing and articles wholly or partly made up.....		10 p.c. above the highest rate chargeable on material or which composed.			

BELGIUM.

Woolen tissues:	5 p.c. ad val.	5 p.c. ad val.
Indian cashmere shawls and scarves.....	10	"
All other tissues of wool or hair.....	10	"
Hosiery and knitted wares.....	10	"
Haberdashery, fringes, tapes, ribbons, etc.....	10	"
Lace.....	10	"
Other manufactures of wool and hair.....	10	"
Ready-made clothing.....	10	"

RUSSIA.		Rates of Duty.		English Equivalents.	
Tariff Classification in each Country.	Rubls. Cop.	£	s.	d.	
Flannel blankets and woollen horse cloths.....	Funt	0-55	Cwt.	10 16 3	
Tissues of wool or goats' hair, full, or unfurled, pure or mixed with cotton, plain, figured, or embroidered, not otherwise enumerated.....	"	1-10	"	21 12 6	
Do., do., printed.....	"	1-43	"	29 2 3	
Note.—(1) Unmilled stuffs of wool or goats' hair having the warp or woof of silk or waste silk pay as silk goods; but if the admixture of silk or of waste silk consist only of patterns or stripes woven in or embroidered, such goods pay 20 per cent. in addition to the duties on unmilled stuffs, plain or printed.					
(2) Neckcloths, scarves, plaids, &c., other than those named below, pay duty according to the material of which made.					
Bunting and white woollen stuffs for millers' sieves; woollen sashes of all sorts without admixture of silk.....	"	0-31	"	5 18 0	
Shawls, handkerchiefs, sashes, and scarves, Turkish or cashmere; French terno or half-terno; and detached borders, edgings, and similar stuffs; of pure wool or of wool mixed with cotton, silk, or waste silk.....	"	3-95	"	77 18 2	
Unmilled woollen stuffs for use in manufactories, bags for oil pressing, sugar manufacturers, &c.....	"	0-13	"	2 11 1	
Cloth list, and all kinds of felt undyed, dyed, or printed.....	"	0-18	"	2 11 1	
Woollen carpets of all sorts.....	"	0-40	"	7 17 3	
Fezes, or Turkish caps of wool, embroidered with spangles or not.....	Dozen	2-40	Dozen	0 7 7	
Haberdashery, galloons, braid, &c., of pure wool or of wool mixed with cotton, flax, or hemp.....	Funt	0-65	Cwt.	12 15 7	
Tapes and ribbons of pure wool, or of wool mixed with cotton, flax, or hemp.....	"	0-85	"	12 15 7	
Hosiery and knitted wares of wool, pure or mixed with cotton, flax, or hemp; gloves, stockings, &c.....	"	0-65	"	12 15 7	
Note.—Woollen hosiery and haberdashery, embroidered or otherwise ornamented, with silk pay the duties stated above, with an addition of 20 per cent.					
Ladies and children's gloves trimmed with lace pay as articles of clothing, trimmed.					
Buttons.....	"	0-60	"	11 15 11	
Lace, machine made.....	"	3-50	"	68 16 2	
Do., hand made.....	"	6-60	"	129 15 1	

NORWAY.

Felt for machinery and industrial uses, for pianoforte hammers, &c., cloth lists, and cloths for paper machines.....	Free.	Free.
Felt, other kinds.....	Kilog.	0-80
Carpets and carpet stuffs, also girths.....	"	0-47
Blankets.....	"	0-47
Hosiery and knitted wares:		
Coarse stockings, jackets, mittens, &c.....	"	0-27
Other kinds, including scarves of all sorts.....	"	1-10
Ribbons and tissues mixed with india-rubber or gutta-percha, and waistbands of the same.....	"	1-10
Other tissues:		
Lace, blonde, tulle, and bobbinet.....	"	2-50
Other open-woven or transparent tissues.....	"	1-76
Close-woven tissues embroidered with silk or metal threads.....	"	2-30
All other kinds.....	"	0-80
Haberdashery, trimmings, buttons, fringes, &c.....	"	1-54
Ready-made clothing.....	As the material of which made, with an addition of 10 per cent.	

Note.—Tissues of wool mixed with cotton, linen, or hemp, pay as above; tissues of wool mixed with silk pay as silk tissues.

Gazette News.

ADJUDICATIONS.

Frederick W. Fox, Higher Ghyll Mill, Menston-in-Wharfedale, Yorks., spinner, etc.

RECEIVING ORDERS.

Frederick Fox, Menston-in-Wharfedale, spinner; Leeds.
Yewdall, A. C. (lately trading as Botterill, Potter and Co.), dyer, Garnet-street, Bradford.

PARTNERSHIPS DISSOLVED.

E. T. Fox and Co., parishes of Woodchester and Rodborough, Gloucester, woollen cloth manufacturers.
Smith and M'Laren, Springfield Mill, Keighley, Yorkshire, worsted spinners.
Stead and Feather, Darton Mills, Keighley, wool combers.

Lunn and Sons, glove and fancy hosiery manufacturers, Leicester and Measham.
Wilkinson and Fearnley, cloth and yarn agents, York-street, Manchester.

DIVIDENDS.

John Edward Sunderland, 11, Beverley-terrace, Akroydon, Halifax, waste dealer; 1s. 10½d. first and final.

RECEIVING ORDERS.

Davies, E., woollen manufacturer, Llwndafydd, Carmarthen.
Stanyer, E., woollen merchant, Long Millgate, Manchester.

Patents.

APPLICATIONS FOR PATENTS.

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

Where Complete Specification accompanies Application an asterisk is suffixed.

10TH MARCH.

- 3,733. W. H. REVIS and J. MARRIOTT, Goldsmith St. Works, Nottingham. Circular ribbed fabrics, and machinery therefor.
- 3,748. J. POLLIT and J. MULLIN, 5, John Dalton-street, Manchester. Carding engines with revolving flats.
- 3,749. H. BLAKELY and C. BEVING, 17, St. Ann's-square, Manchester. Ornamenting textile fabrics.
- 3,773. I. HERR, 46, Lincoln's Inn Field, London. Looms.
- 3,788. M. G. LINDEMANN, 45, Southampton Buildings, London. Treatment of dye-woods and their extracts.
- 3,792. W. L. WISE, 46, Lincoln's Inn Fields, London. "Lamb" knitting machine. (*Dreadner Strick maschinen-fabrik Laue and Timaeus, Germany.*)

11TH MARCH.

- 3,815. G. WALKER and W. PARKER, Fairlight Villas, Rochdale. Prevention of ballooning on ring-frames and similar machines.
- 3,816. J. HALL, Ekowe-street, New Basford, Nottingham. Ornamental designs on lace and other fabrics.
- 3,823. W. ARKWRIGHT, 77, Colmore-row, Birmingham. Straight-bar knitting machines.
- 3,846. H. H. LAKE, 45, Southampton-buildings, Middlesex. Shrinking and felling of felt materials, chiefly for use in the manufacture of felt hats. (*P. V. Husted, U.S.*)
- 3,848. E. SMITH and T. COOPER, 47, Lincoln's Inn Fields, London. Looms for weaving chenille fabrics.
- 3,849. E. SMITH and T. COOPER, 47, Lincoln's Inn Fields. Looms for weaving chenille fabrics.

12TH MARCH.

- 3,869. T. CALVERT and J. HUNT, 25, Brackenbury-street, Preston. Flexible duplex shuttle-checking motion for looms.
- 3,875. S. W. WILKINSON, 17, St. Ann's-square, Manchester. Regulating and humidifying the atmosphere in mills.
- 3,881. GEO. CASEY, 8, Quality-court, London. Grinding the surfaces of cards or flats of carding engines.
- 3,903. H. J. HADDAN, 18, Buckingham-street, London. Circular loom. (*E. J. L. Perrot and J. Papeux, France.*)

13TH MARCH.

- 3,928. J. BOARDMAN, 4, St. Ann's-square, Manchester. The governing motion of self-acting mules and twiners for spinning and doubling.
- 3,934. C. LONBOTTOM, 20, Charles-street, Bradford. Packing cases for holding pile and other fabrics.
- 3,962. G. MARCHETTI and H. CROSSLEY, 4, South-street, Finsbury, London. Printing yarns.
- 3,971. H. A. A. DOMBRAIN, 23, Southampton-buildings, London. Cleansing wool and apparatus therefor.

14TH MARCH.

- 3,989. G. W. GROSVENOR, Worcester-cross, Stour Vale Mills, Kidderminster. Tufted pile carpets.
- 3,990. JOHN DODD, 18, St. Ann's-street, Manchester. Traverse motions for the sliver or roving guides used in machinery for preparing and spinning cotton, etc.
- 4,008. J. HIGGINSON, Junior, 13, Temple-street, Birmingham. Controlling the speed of rotation of spindles in spinning mules.
- 4,020. G. RATH, 37, Chancery-lane, London. Weaving plashes.

4,033. H. B. ASHFORD, 24, Southampton-buildings, London. Hosiery.

15TH MARCH.

4,048. R. CLEGG, 17, St. Ann's-square, Manchester. Automatic cop bottom governing motion for self-acting mules and twiners.

4,049. S. CALVERT, 58, Low-street, Keighley. Apparatus for the manufacture of twine.

4,050. W. TATTERSALL, 20, Charles-street, Bradford. Humidifying the air of factories, also applicable for ventilating and heating or cooling.

4,051. W. HARRISON, Arcade Chambers, Manchester. Machines for knitting stockings, gloves, etc.

4,052. W. HARRISON and C. W. HARRISON, Arcade Chambers, Manchester. Machines for knitting stockings and clothing.

4,055. W. ARKRIGHT, 77, Colmore-row, Birmingham. Straight-bar knitting machines.

4,057. GEO. CROWTHER and A. WILDE, 4, St. Ann's-square, Manchester. Boxes used for pasting cop bottoms.

4,065. E. GARSIDE, 5, John Dalton-street, Manchester. Sizing machines for sizing woollen warps.

4,081. S. H. BROOKS and J. EDGE, 6, Bank-st., Manchester. Apparatus for grinding revolving flats of carding engines in situ.

4,082. S. H. BROOKS and J. EDGE, 6, Bank-st., Manchester. Apparatus for testing the accuracy or truth of flat, cylindrical, or other surfaces, applicable for testing the wire surfaces of carding engines.

4,097. C. J. COX, 166, Fleet-street, London. Method of and machinery for "dressing" lace, gauze, and other fabrics.

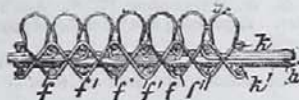
SPECIFICATIONS PUBLISHED.

1889.

- 3,544. COWBURN and PECK. Looms. 1s. 3d.
- 5,079. WILCOX (*Farbenfabriken vormals F. Bayer and Co.*) Periodides of phenols, &c. 6d.
- 6,258. LANG. Circular Knitting frames. 8d.
- 6,621. JONES. Carding engines. 6d.
- 6,639. ROTHWELL and ROTHWELL. Sectional warping machines. 8d.
- 6,701. WILKINSON. Flat carding engines. 6d.
- 6,706. MILLIGAN and BRIGGS. Jacquard looms. 8d.
- 6,717. MOULDING. Transmitting woven piece goods in finishing, etc. 4d.
- 6,798. MORTIMER. Weaving shuttles. 6d.
- 7,489. COINON. Drying linen, etc., fabrics. 8d.
- 7,550. ABEL. (*Actiengesellschaft für Alinin-fabrikation*) Colouring matters. 6d.
- 8,237. PARKINSON. Dyeing cotton yarns, &c. 6d.
- 10,600. LORD. Damping warps in looms. 6d. 1890.
- 1,171. FRANCK. Knitting machines. 8d.

ABSTRACTS OF SPECIFICATIONS

13,440. Sept. 18, 1888. **Pile Fabrics: looms.** G. W. NAYLOR and B. Z. LLOYD, both of Mill-street, Kidderminster.



Fabrics.—"Brussels," "Wilton," and other looped and cut pile carpets, rugs, and similar fabrics are woven with an extra backing A between the worsted *g, g'* and the ordinary back formed by the ground warp *f, f'* and welt *k, k'*.

Looms.—In the loom employed the warp A is operated by the head that has usually been worked by the comb board, but which is now worked by tappets, levers, and springs from below. [6d.]

13,337. Sept. 15, 1888. **Morseen Fabrics.** G. FALKENSTEIN, Vicar-lane, Bradford.

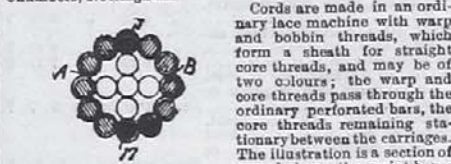
Morseen or watered fabrics, such as are employed for undershirts and the like, are woven with a warp of wool, or both, of mixed yarn. [4d. No Drawings.]

13,351. Sept. 15, 1888. **Damask Looms.** A. J. BOULT, 823, High Holborn, London.—(*O. Letz, Neukönig, Germany*).



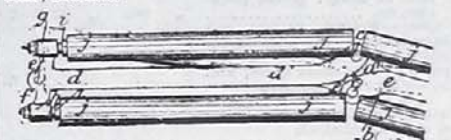
To each row of lifting hooks *p*, several of which go to each needle N, there is an upper or pattern knife or blade *m* acting on the noses or hooks *v*, and a lower or satin knife *a* acting on the noses A. The knives are journaled in their frame, and are pressed on by springs *f*. Two sliding bars *b, b'*, formed with projections and pins are employed for putting certain knives out of action, such bars being acted on at their ends by peg cylinders. Enlargements *p'* are formed to prevent the hooks, when lifted, from rubbing on the eyes of the returning needles. In larger machines the knives are arranged loosely in slotted guides, and are lifted out of action, as required, by special hooks set by a separate card cylinder and needles. The main cylinder frame is operated through a connecting rod from a grooved pivoted plate working on a bowl on the knife frame. [8d.]

13,501. Sept. 19, 1888. **Cords.** E. BRADSHAW, 2, Eskell Chambers, Nottingham.



Cords are made in an ordinary lace machine with warp and bobbin threads, which form a sheath for straight core threads, and may be of two colours; the warp and core threads pass through the ordinary perforated bars, the core threads remaining stationary between the carriages. The illustration is a section of a cord above the point bars; two of the warp threads 1, 17 are enclosed by both bobbin threads A, B. [8d.]

13,514. Sept. 19, 1888. **Guiding and Stretching Fabrics.** J. HANTHORN and J. P. LIDDELL, Newtown New Mills, Cheshire.



For guiding, opening, and stretching cloth during the process of washing, bleaching, printing, or the like, it is passed under the first and over the second of inclined grooved rollers *f*. These rollers rotate upon studs *i* carried by brackets *g, a* on double arms *d, d'*, &c. These arms are pivoted on studs *c* on a fixed block *b*, and each consists of a strong upper limb *d* or *e* and a slight lower limb *d'* or *e'*, the upper limb of one being connected to the lower of the other by pin and slot *f*. The arms *d, e* may be single and connected by pinions, toothed sectors, or a link. [8d.]

13,583. Sept. 20, 1888. **Opening and Cleaning Cotton.** etc. T. and S. BUCKLEY, Wood Mill, Woodley, Cheshire.

Clasings.—Improvement on the invention described in Specification No. 15,106, A.D. 1886. Openings are formed in the base of the apparatus and filled in with sections of gratings similar to those in the sides of the apparatus. [6d., Drawings.]

13,592. September 20, 1888. (Date given under Sec. 103 of the Patents, etc., Act, 1883, February 21, 1888.) **Towels.** F. LEAKE, Philadelphia, U.S.A.

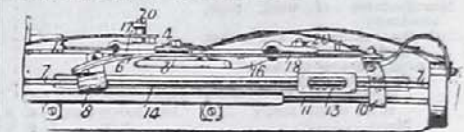
The towel is composed of a closely woven body having two terry faces, the loops upon one face being composed of soft material, and those on the other of harsher material. [6d. Drawings.]

13,614. Sept. 20, 1888. **Spinning Mules.** J. C. MURBURN, 55, Chancery-lane, London.—(*A. Noel, Tancarville, Nord, France*).

The angle formed by the spindles and threads during the stretch is regulated by means of the counterfaller or other

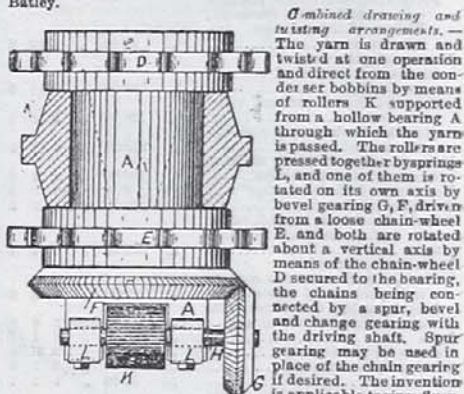
suitable support raised into the required position beneath the threads. [8d. Drawings.]

13,637. September 21, 1888. **Looms.** W. H. DECKWORTH, 33, Baywood-street, Blackburn



Checking Shuttles and Pickers.—A strap *9*, passing between spring pads 3, 4, carries at one end a leather loop *8*, threaded on the picker spindle 7, and at its other end a loop 10, threaded on a short spindle 11; the back board of the shuttle box being dispensed with. The picker 13 is guided in a long groove 14 in the bottom of the box, and is checked by striking against the loops 8, 10. The box tongue 15 is formed of malleable iron and the swell 16 of cast iron, and these are carried in brackets 17, 18 adjustable by means of nuts 20. The tongue 15 and its grate may be in two parts. The provisional specification describes the part 6 as being a metal slide piece with end lugs, each threaded on the picker spindle. [8d.]

13,649. Sept. 21, 1888. **Spinning.** J. PORRITT, Laurel-street, Bradford; A. PORRITT, Meadow lane, Leeds; M. PORRITT, Leeds-road, Bradford; and W. H. FENTON, Field-lane Batley.



Combined drawing and twisting arrangements.—The yarn is drawn and twisted at one operation and direct from the condenser bobbins by means of rollers K supported from a hollow bearing A through which the yarn is passed. The rollers are pressed together by springs L, and one of them is rotated on its own axis by bevel gearing G, F, driven from a loose chain-wheel E, and both are rotated about a vertical axis by means of the chain-wheel D secured to the bearing, the chains being connected by a spur, bevel and change gearing with the driving shaft. Spur gearing may be used in place of the chain gearing if desired. The invention is applicable to ring, flyer, or cap frames. [8d.]

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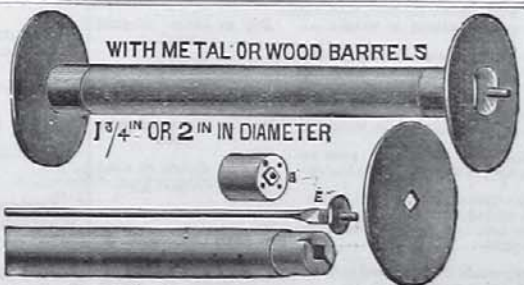


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And wherein it excels all others, is that the heads contain a square hole in the centre, and are fitted on a square projection attached to the end of the barrel, as shown in the woodcut; thus the heads cannot turn round or get loose, and this is the only means of avoiding the frequent and costly repairs, and the abundance of loose bobbin ends so common in your mills. Old Bobbin Ends may be utilized and converted to this principle.

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