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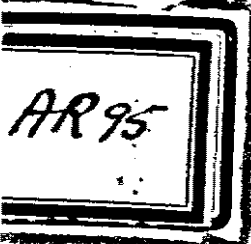
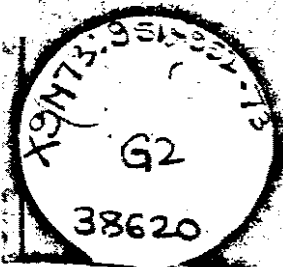
BUREAU OF LABOR STATISTICS

CHARLES E. BALDWIN, Acting Commissioner

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WAGES AND HOURS OF LABOR SERIES

**WAGES AND HOURS OF LABOR
IN THE MANUFACTURE OF
SILK AND RAYON GOODS: 1931**



NOVEMBER, 1932

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Appendix

Factory terms of occupations, with definitions, and classification by Bureau of Labor Statistics

Factory term	Definition	Classified by bureau under—
Agar operator	Regulates temperature, steam pressure, and ventilation of machine, and speed at which cloth or yarn is run through it. This application of moist heat develops and fixes the colors on printed cloth or yarn and gives printed designs the appearance of being woven in.	Other employees.
Assistant foreman	(See Foreman, assistant)	Do.
Automatic weaver	Operates looms used for weaving broad silk in which bobbins of filling are fed into them automatically. The work of weaving is similar to that done by other broadcloth weavers.	Weavers, broad silk.
Back tender	Attends rear end of machines used for printing designs or patterns on cloth goods, to see that cloth runs from rolls properly.	Other employees.
Back winder	(See Rewinder)	Rewinders.
Bale opener	Cuts tie bands, removes covers, and opens bales of raw silk received from importer. This work is often done by soakers.	Other employees.
Bale piler	Moves and piles bales of silk in receiving room or other place about the plant.	Do.
Baler, waste paper	(See Paper baler)	Do.
Bander	Laces bands through skeins by hand on four sides of fly to prevent them from becoming tangled when in process of dyeing. This work is done after fly has been placed on banding stand. When 12 skeins have been banded, an identification check is tied on the fly.	Do.
Banker	(See Creeler)	Do.
Beamer	Tends machine which transfers warp from large drums or creels to smaller ones known as beams, and places a layer of paper between threads at every turn of beam.	Do.
Beltman	Installs and repairs power-transmission belts throughout the plant.	Do.
Blacksmith	Does repair welding of metal parts by hand, or forms parts on anvil with hand hammer.	Do.
Block maker	Uses a brush by hand to cement out parts of cardboard to make small forms or "blocks" on which ribbon is wound. May also operate a machine which cuts these parts.	Do.
Board filler	(See Creeler)	Do.
Bobbin boy	Collects and distributes bobbins, quills, or spools, and sometimes cleans the empty ones.	Bobbin boys.
Bobbin carrier	(See Bobbin boy)	Do.
Bobbin cleaner	Uses sand or emery paper to remove accumulated lint or any other substance. This term also applies to those who remove silk from partly filled bobbins left by warpers.	Other employees.
Bobbin doffer	(See Doffer)	Do.
Bobbin fixer	Uses sandpaper to smooth rough or cracked places or may remove chipped or split ends and replace them with new ones.	Do.
Bobbin weigher	Places full bobbins of yarn on scales to determine weight of yarn, as well as for payment of work of winding.	Do.
Box loom weaver	Operates loom containing 2 to 4 boxes on each side and from 3 to 7 shuttles. His duties are very similar to those of any other broadcloth weaver.	Weavers, broad-silk.
Box maker	Constructs boxes in which product is shipped.	Other employees.
Boxer, ribbon	Packs rolls of ribbons in boxes of specified sizes.	Do.
Breaker operator	Tends machine which removes hard and stiff condition of fabric, which was attained during finishing process.	Do.
Broad-silk weaver	(See Weaver, broad-silk)	Weavers, broad-silk.
Brusher, warp	Uses hand brush to straighten warp ends for twister-in.	Other employees.
Bundler	Twists 4 to 8 skeins of yarn together in a roll and ties about 20 of these rolls into a bundle to be sent to dyer or to weaving mill.	Do.

Factory term	Definition	Classified by bureau under—
Calender operator.....	Tends calender machine, which imparts gloss or soft finish to fabric as it passes through it under pressure.	Other employees.
Card cutter, Jacquard.....	Operates punching machine for cutting designs in cardboard used in Jacquard looms.	Do.
Card cutter's helper, Jacquard.....	Works under supervision of the card cutter, Jacquard.	Do.
Carpenter.....	Makes changes and repairs in woodwork structure of plant.	Do.
Carpenter's helper.....	Assists carpenter in repair and upkeep of buildings and does other work under his supervision.	Do.
Carrier, general.....	(See Floor boy).....	Do.
Carrier, quills.....	(See Quill boy).....	Bobbin boys.
Chain builder.....	Constructs steel chains used in looms for pattern weaving.	Other employees.
Check clerk.....	(See Checker).....	Do.
Checker.....	Checks or counts picks of loom ends of warp, number or weight of bobbins in winding or spinning. Also records quantity of materials received, goods produced, etc.	Do.
Checker, stock.....	(See Stock clerk).....	Do.
Cleaner hand (dye house).....	Sweeps and scrubs dyehouse floors and cleans dyeing machines, tanks, etc.	Laborers, dyehouse.
Cleaner, cloth.....	(See Cloth cleaner).....	Other employees.
Cleaner, harness.....	(See Harness cleaner).....	Do.
Cleaner, looms.....	(See Loom cleaner).....	Do.
Cleaner, machine.....	(See Machine cleaner).....	Do.
Cleaner, quills.....	(See Quill cleaner).....	Do.
Cleaner-up.....	Sweeps and cleans up around machines of the plant.	Do.
Cloth cleaner.....	Uses cleaning preparations to remove spots of dirt, grease, etc., from woven goods.	Do.
Cloth examiner.....	Inspects woven cloth for imperfections.	Inspectors, cloth.
Cloth inspector.....	(See Inspector, cloth).....	Do.
Cloth picker.....	(See Picker, cloth).....	Pickers, cloth.
Cloth printer.....	(See Printer, cloth).....	Other employees.
Cloth stretcher.....	Feeds and minds tentering machine in which width of cloth is stretched while wet or steamed, by means of clips attached to two endless chains rotating at specified distances apart, and is then dried under tension; regulates heat of steam pipes or gas jets which supply heat for drying.	Do.
Color man.....	(See Color mixer).....	Do.
Color mixer.....	Prepares colors by mixing specified pigments or other ingredients for printing machines or dye tanks.	Do.
Conditioner, silk.....	(See Silk conditioner).....	Do.
Cone inspector.....	Examines filled cones for irregularities.	Do.
Cone wrapper.....	Wraps filled cones in paper by hand to assure perfect condition in transit.	Do.
Coner.....	Operates machine which winds spun yarn from bobbins on to wooden receptacles in shape or form of cone for use by knitters of hosiery or underwear.	Coners.
Cop examiner.....	Inspects filled cops to see that they are properly wound.	Other employees.
Copper.....	Operates machine which winds spun yarn from bobbin on to cops (paper tubes) instead of quills, for use by weavers as well or filling in loom shuttles.	Quillers.
Counter.....	(See Measurer, cloth).....	Other employees.
Counter girl.....	Hands out bobbins for distribution to machines where needed.	Do.
Crate maker.....	(See Box maker).....	Do.
Creeler.....	Keeps creels or racks supplied with full spools of yarn.	Do.
Cut-off man.....	Because of the multiple number of ribbons woven on each loom a special operator other than weaver, is usually employed to cut off the completed lengths of woven ribbon from the loom. This work is done with a pair of hand shears.	Do.
Cutters, cards, Jacquard.....	(See Card cutter, Jacquard).....	Do.
Degummer.....	(See Soaker).....	Do.
Designer.....	Devises new patterns for weaving cloth on Jacquard looms.	Do.
Distributor (general).....	Carries goods in process of manufacture from one machine to another.	Do.
Distributor (quills).....	(See Quill boy).....	Bobbin boys.
Doffer.....	Removes full bobbins from spinning or winding frames and replaces them with empty ones.	Other employees.
Dope mixer.....	Prepares compound known as "dope" or finishing solution used in finishing process.	Do.
Doubler.....	Operates machine which draws two or more threads from as many separate bobbins and winds them on to a single one, at the same time twisting them into a single thread.	Doublers.
Drawer-in.....	Draws warp ends through the heddle eyes of harness in loom.	Enterers.

Factory term	Definition	Classified by bureau under—
Dresser, warp	(See Slasher)	Other employees.
Drop-wire boy	Threads each warp fiber through drop wires (attachment to loom which causes it to stop when a thread is broken).	Do.
Dry-room laborer (dye-house)	Performs all kinds of common labor in dry room of plant.	Laborers, dyehouse.
Dyehouse laborer	(See Laborer, dyehouse)	Do.
Dye-machine hand	Works at and around dye machine under supervision of dyer. Operates machine, placing material on and taking it off; gets chemicals from dyer and prepares bath ready for materials; submits sample to dyer for test and final result.	Do.
Dye-machine tender	Operates dye machine, works at and around it, places material on, takes it off, etc., under direction of dyer.	Other employees.
Dye-stuff keeper	Has charge of dyes and other chemicals used in dyeing, degumming, etc.	Do.
Dye tubman	Works at or about tubs or vats of dyehouse, placing materials in, working them around in tanks, and removing them.	Laborers, dyehouse.
Dyer	Supervises work of degumming, dyeing, matching colors, etc., in dyehouse.	Other employees.
Dyers' assistant	Assists dyer in supervising work in dyehouse.	Do.
Edge warper	(See Warper, edge)	Warpers.
Electrician	Installs and maintains electrical equipment and wiring of plant.	Other employees.
Electrician's helper	Assists electrician in making changes or repairs in electrical equipment of plant.	Do.
Elevator operator	Operates elevator for hoisting or lowering employees or materials from one floor to another.	Do.
Embroiderer	(See Numberer)	Do.
Enterer	Draws warp ends of a new warp through heddle eyes of loom harness.	Enterers.
Enterer's helper	Assists enterer by placing warp ends in proper position to be drawn through heddle eyes of loom harness.	Enterer's helpers.
Enterer, machine	Operates machine which automatically separates each warp end and threads it through each heddle eye of loom harness.	Other employees.
Erector	Is a skilled workman who sets up machines for operation by others.	Do.
Errand girl	Carries messages, packages, and runs errands about plant.	Do.
Examiners	(See Inspector, cloth)	Inspectors, cloth.
Examiner, cops	(See Cop examiner)	Other employees.
Extractor (dyehouse)	Operates machine for extracting moisture from goods.	Do.
Filling boy	Carries full quills and cops of filling to weavers when needed.	Bobbin boys.
Filling superintendent	Has charge of work done in filling or weft department.	Other employees.
Finish mixer	(See Dope mixer)	Do.
Finisher, ribbon	Operates machine which creates, presses, and produces irregular waves or smooth finish to surface of ribbon as it passes over or between various heated rolls.	Do.
Fixer, bobbins	(See Bobbin fixer)	Do.
Fixer, general	Repairs and keeps machines in various departments in good running order.	Do.
Fixer's helper	Assists fixer in repairing various machines about plant.	Do.
Fixer, smashes	(See Smash hand)	Smash hands.
Fixer, warp	(See Warp-machine fixer)	Other employees.
Floor boy	Does general unskilled work about plant wherever needed.	Do.
Floor checker	(See Checker)	Do.
Floor hand	(See Floor boy)	Do.
Floor helper	do	Do.
Floor man	do	Do.
Folder, cloth	Operates machine which folds and measures finished cloth as it passes through machine in preparation for the market. A ticket, showing number of yards, is attached to each piece.	Do.
Foreman, assistant	Assists foreman in supervising, also does considerable productive work.	Do.
Foreman, sub	(See Foreman, assistant)	Do.
Garage man	Cares for, cleans, polishes, lubricates, and makes minor repairs on trucks and autos of plant.	Do.
Gray boy	Puts on and takes off back cloths which cover rolls of printing machine. The cloths serve as a cushion to absorb extra color from the silk.	Do.
Gray-cloth washer	(See Gray-washer tender)	Do.
Gray-washer laborer	Loads and unloads gray cloths from truck to washer.	Do.
Gray-washer tender	Operates machine for washing gray cloth in printing department. Gray cloth is backing used to absorb excessive color from fabric as it is being printed. This backing (gray) cloth is washed after each printing operation to remove excessive color deposits.	Do.

Factory term	Definition	Classified by bureau under—
Hander-in.....	(See Enterer's helper).....	Enterers' helpers.
Hander-up.....	do.....	Do.
Handy man.....	Is a workman of considerable skill, who has no specific duties, but is employed on various kinds of work about plant.	Other employees.
Hanger (dyehouse).....	Hangs skeins of yarn over pegs after dyeing or treating processes for purpose of drying, shakes them well to separate individual fibers and, when dry, rolls several skeins together for subsequent handling.	Laborers, dyehouse.
Hanger, silk.....	(See Silk hanger).....	Other employees.
Hanger, warp.....	(See Warp hanger).....	Do.
Hanger, wet silk.....	(See Wet silk hanger).....	Do.
Hanger, ribbon.....	Operates machine which measures and cuts specified lengths of ribbon.	Do.
Hard-silk winder.....	(See Winder, hard silk).....	Winders, hard silk.
Harness builder.....	Constructs new or remodels old harness for each new pattern of cloth which is woven. The harness is a system of threads or wires (heddles with an eye in the center of each), through which warp threads pass in the loom. The alternate rising and falling of sections of harnesses raises and lowers corresponding warp threads, between which the shuttle carries the filling and creates the weaves of the cloth.	Other employees.
Harness cleaner.....	Makes minor repairs, dusts and cleans lint, etc., from all parts of loom harness before it is again used.	Do.
Harness maker.....	(See Harness builder).....	Do.
Harness man.....	do.....	Do.
Hooker (dyehouse).....	Removes skeins of yarn from vats and hangs them on hooks to drain or dry.	Laborers, dyehouse.
Humidity man.....	Regulates humidity of air in mill by means of a sprinkler system.	Other employees.
Inspector, cloth.....	Examines finished cloth for defects of any character which may have passed the pickers.	Inspectors, cloth.
Inspector, cones.....	Examines filled cones to ascertain if winding is properly done.	Other employees.
Inspector, looms.....	(See Loom inspector).....	Do.
Inspector, process.....	(See Process inspector).....	Do.
Inspector, quality.....	(See Quality inspector).....	Do.
Inspector, quills.....	(See Quill inspector).....	Do.
Invoiceer.....	Makes records of goods passing through mill or for shipment.	Do.
Jacquard fixer.....	(See Loom fixer).....	Loom fixers.
Jacquard weaver.....	Operates loom used for weaving designs of various shapes, figures, or colors into cloth.	Weavers, brown-silk.
Knitting-machine operator.....	Operates machine which ties old warp ends to those of new warp.	Other employees.
Knitting-machine operator's helper.....	Brushes out tangled ends of warp, in preparation for knitting machine operator.	Do.
Labeller.....	Pastes descriptive labels on finished rolls of ribbon or other product.	Do.
Laboratory assistant.....	Works under direction of graduate chemist, in making simple quality and quantitative tests.	Do.
Laborer.....	Does heavy and unskilled work about plant and yard.	Do.
Laborer, dyehouse.....	Does unskilled labor, such as placing skeins of silk into "degumming," washing, or dyeing tanks; works stock back and forth in any of the solutions; transfers stock to various tanks, etc., under direction of superiors.	Laborers, dyehouse.
Lacer.....	Uses bands or laces to tie through several sections of each skein on four sides of fly to prevent it from becoming tangled when in process of dyeing.	Other employees.
Loom cleaner.....	Uses brush and cotton waste with cleaning preparation to remove dirt, lint, grease, etc., from various parts of loom, and may oil same when necessary.	Do.
Loom fixer.....	Is a highly skilled mechanic who sets up, repairs, adjusts, and keeps looms in proper running order.	Loom fixers.
Loom fixer's apprentice.....	Works with loom fixer to learn duties of the occupation.	Other employees.
Loom fixer's helper.....	Works under supervision of loom fixer in making repairs and adjustments.	Do.
Loom girl.....	Helps weavers start looms, and assists smooth hands in mending broken warp, filling threads, etc.	Do.
Loom inspector.....	Examines cloth on loom, which is in process of weaving, to determine whether imperfections of filling or warp are being eliminated.	Do.
Lot maker and stitchee.....	Makes up and stitches lots for machine operations.....	Do.
Lot maker-up.....	Prepares printed pieces into lots for steamer and ages.	Do.
Machine cleaner.....	Uses cleaning preparation on cotton waste to remove dirt, lint, etc., from looms and other machines.	Do.
Machine fixer.....	Makes minor repairs and keeps in good running order machines in various departments of plant.	Do.

Factory term	Definition	Classified by bureau under—
Machine reeder.....	Operates machine used for drawing warp ends between blades or thin wires of reed frame which keep the ends separate and in their proper places while weaving.	Other employees.
Machine repairer.....	(See Machine fixer).....	Do.
Machinist.....	Installs, moves, repairs, and adjusts machines, and makes minor parts.	Do.
Machinist's helper.....	Assists machinist in setting up machines, making repairs, and does any other work as directed by him.	Do.
Magazine boy.....	Keeps magazines of automatic looms filled with quills or cops.	Do.
Mail boy.....	Collects and delivers mail or orders from and to desks in various departments.	Do.
Matron.....	Looks after comfort of females who visit rest room.	Do.
Measurer, cloth.....	Measures and cuts woven goods into commercial lengths. Also makes record of yardage in each piece.	Do.
Measurer, ribbon.....	Operates machine for winding, measuring, and cutting ribbon into specified lengths for the market.	Do.
Mechanic.....	(See Machine fixer).....	Do.
Mechanic for reelers.....	(See Reeler mechanic).....	Do.
Mechanic for windars.....	(See Winder mechanic).....	Do.
Mechanic's helper.....	Assists mechanic in making repairs on machines in various departments and keeping same in proper running order.	Do.
Messenger.....	Carries messages, packages, etc., from one department to another.	Do.
Millwright.....	Installs or moves machinery, shafting, etc., and makes repairs not made by fixers and machinists.	Do.
Millwright's helper.....	Assists millwright in installing machinery, shafting, pulleys, etc.	Do.
Mixer, colors.....	(See Color mixer).....	Do.
Mixer, dope.....	(See Dope mixer).....	Do.
Moveman.....	(See Truck pusher).....	Do.
Numberer.....	Operates sewing machine for embroidering numbers or other designs in edge of silk for identification after being dyed.	Do.
Oilier.....	Supply oil and grease to working parts of machines, shafting, etc.	Do.
Oilier's helper.....	Works under supervision of oilier.....	Do.
Opener.....	(See Bale opener).....	Do.
Opener's helper.....	Assists in opening and removing contents of bales.	Do.
Other employees.....	This group includes all occupations in the industry other than the selected occupations. Each occupation had too few workers in number to warrant separate tabulation, and is defined and arranged alphabetically in this glossary.	Do.
Painter.....	Uses brush or spray to paint any part of factory building.	Do.
Palmer operator.....	Feeds cloth into and operates machine which stretches the goods to proper width and fixes the finish.	Do.
Paper baler.....	Files waste paper into machine which presses it into a compact bundle. Wires are then fastened around to hold it together.	Do.
Picker, cloth.....	Inspects cloth for imperfections as it comes from loom, picking out loose ends or knotted threads, removing lumps and "mispicks," cleaning spots, etc.	Pickers, cloth.
Picker, cloth, machine.....	Operates machine which automatically removes loose ends, knotted threads, lumps, or other foreign matter from cloth.	Do.
Piece weighter.....	(See Tinman, dyehouse).....	Other employees.
Pinner, ribbon.....	Fastens, with a pin, ends of each piece of ribbon to block on which it is wound.	Do.
Pipe man.....	Cuts and fits new pipe where needed. Repairs and maintains steaming, drying, and draining systems of dyehouse and other departments.	Do.
Plumber.....	Repairs and maintains plumbing throughout plant.	Do.
Plumber's helper.....	Assists plumber by passing tools or parts to be used in repair work.	Do.
Porter.....	Does sweeping, cleaning, carrying goods from one department to another, and other common labor about plant.	Do.
Preparer, ribbon.....	Arranges or winds ribbon which has been woven (without color) into skeins or bundles of suitable lengths for dyeing, depending on width, ranging from 50 yards for wide to 500 yards for narrow. These skeins are laced or otherwise tied to prevent being tangled during dyeing process.	Do.
Printer, cloth.....	Operates machine which prints design or pattern on woven cloth.	Do.
Process inspector.....	Examines for defects goods in process of manufacture.	Do.

Factory term	Definition	Classified by Bureau under—
Production boy	(See Checker)	Other employees
Quality inspector	Examines finished goods for quality test	Do.
Quetch operator	Runs machine which impregnates cloth with preparation known as finish sling which is composed of gelatines, softening oils, etc. It is used to fill body of the cloth.	Do.
Quill boy	Supplies looms with full quills of filling yarn whenever needed.	Bobbin boys.
Quill carrier	(See Quill boy)	Do.
Quill cleaner	(See Bobbin cleaner)	Other employees.
Quill distributor	(See Quill boy)	Bobbin boys.
Quill inspector	Examines quills of filled yarn for defects.	Other employees.
Quiller	Operates machine which winds spun yarn from bobbins on to quills for use by weavers as the warp or filling in loom shuttles.	Quillers.
Raw-stock tender	Has charge of raw-silk storage; gets out orders; and maintains record of quantity in stock.	Other employees.
Rayon winder	(See Winder, rayon)	Winders, rayon.
Rebeamer	Operates machine which transfers warp from one beam to another.	Other employees.
Reclaimer, soap tank	(See Soap reclaim tankman)	Do.
Redrawer	Operates machines which transfers yarn from one spool to another.	Redrawers.
Reed fixer	Repairs and puts new metal blades or wires in reed frame of loom.	Other employees.
Reed maker	Makes up new reed frames for looms or repairs old ones. The main function of loom reed frame is to keep warp ends separate and to beat up the filling to cloth.	Do.
Reed man	Cleans, stores, and gives out reed frames when needed.	Do.
Reed repairer	(See Reed fixer)	Do.
Reeder	Enters warp ends between metal blades or thin wires of reed frame, which serves to keep the warp ends separate and in proper place while weaving.	Do.
Reel carrier	Carries full reels to hooks for stripping and replaces them with empty reels.	Do.
Reel stripper	Removes full skeins of yarn from reels	Do.
Reeler mechanic	Makes repairs or adjustments on reeling machines	Do.
Reeler	Operates machine which transfers yarn from spools to skeins for purpose of dyeing in skeins.	Reelers.
Rejoiner	Winds yarn from partly filled bobbins or spools to make full ones.	Redrawers.
Roller	Operates machines which transfers cloth from one roll to another.	Other employees.
Rewinder	Operates machine which winds yarn from one spool to another.	Rewinders.
Ribbon boxer	(See Boxer, ribbon)	Other employees.
Ribbon cleaner	Uses liquid cleaning compounds to remove spots of dirt, oil, grease, etc., from ribbon.	Do.
Ribbon finisher	(See Finisher, ribbon)	Do.
Ribbon hanker	(See Hanker, ribbon)	Do.
Ribbon pinner	(See Pinner, ribbon)	Do.
Ribbon preparer	(See Preparer, ribbon)	Do.
Ribbon warper	(See Warper, ribbon)	Warpers.
Ribbon weaver	(See Weaver, ribbon)	Weavers, ribbon.
Ribbon winder	Operates machine which winds finished ribbon on paper blocks, and cuts it to specified lengths.	Other employees.
Roll handler	Loads and unloads rolls of cloth to and from hand trucks and transfers them to various departments.	Do.
Rubber	Uses prepared cleaning chemical to rub chafes, grease, or oil spots from cloth.	Do.
Sampleman	Prepares samples of cloth for the trade	Do.
Scrubber	Uses mop with water to scrub factory floors.	Do.
Seamstress	(See Stitcher)	Do.
Second hand	(See Foreman, assistant)	Do.
Section hand	Supervises small group of workmen, as well as performing some production labor.	Do.
Sewer	(See Stitcher)	Do.
Shaker	Shakes and straightens out skeins of yarn in process of dyeing and before being placed on reels for winding.	Do.
Shearer, cloth	Operates machine, with very sharp revolving knives, which shears surface of cloth smooth as it passes over, usually on velvet, plush, and pile fabrics.	Do.
Shearer's helper	Works under supervision of shearer, cloth.	Do.
Shipper	Supervises packing and shipping of goods and keeps records of quantity, dates of shipments, destination, etc.	Do.
Shipping clerk	Keeps records of goods shipped, dates, destination, etc.	Do.
Shook maker	Assembles and nails together into complete units shipping boxes purchased in sections.	Do.

Factory term	Definition	Classified by bureau under—
Silk conditioner	Draws samples of raw silk from bale, dries out all moisture, weighs samples before and after drying, to determine amount of moisture content. A sprinkling (damping) machine is then used to add sufficient water to bring moisture content to 11 per cent, which is the normal amount required for silk yarn.	Other employees.
Silk hanger	Straightens out and hangs skeins of yarn on hooks for drying after soaking process.	Do.
Silk opener	(See Bale opener).	Do.
Silk snapper	Straightens out skeins of silk after soaking or dyeing. Snaps and shakes them into shape.	Do.
Silk soaker	(See Soaker).	Do.
Silk tester	Examines threads in skeins of silk received from importers or throwsters, for quality, weight, twist per inch, etc.	Do.
Silk throwster	Tends any of various twisting and doubling machines, pieces broken threads, reels spun yarn, which is to be dyed in skeins, laces them to prevent tangling, etc.	Do.
Singeing-machines operator.	Regulates speed of machine equipped with flaring gas jets used for singeing loose ends and lint from surface of woven goods as it passes through machine.	Do.
Slizer, warp	(See Slasher).	Do.
Skein straightener	(See Silk snapper).	Do.
Skein winder	(See Reeler).	Reelers.
Skein, ribbon	(See Preparer, ribbon).	Other employees.
Skein, yarn	(See Reeler).	Reelers.
Slasher	Operates machine which coats warp threads with starchy substance known as "size," which gives it strength and smoothness so that it will stand continued beating up of filling by reed frame in loom.	Other employees.
Smash firer	(See Smash hand).	Smash hands.
Smash hand	Repairs smashes or breaking of warp and filling threads, crossing of threads, or other causes of serious interruption of work of weaver.	Do.
Smash piecer	(See Smash hand).	Do.
Snapper, silk	(See Silk snapper).	Other employees.
Soaker	Places skeins of raw silk into softening tanks, works them around in soap water or other chemicals, which softens gum on the fiber.	Do.
Soaker's helper	Assists soaker in working skeins about in soaking tanks.	Do.
Soap reclaim tankman	Attends settling machine which reclaims soap from degumming liquids after soaking operation.	Do.
Soft-silk winder	(See Winder, soft silk).	Winders, soft-silk.
Spare hand	Is an extra workman with considerable skill who replaces those absent for any cause, generally in weaving department.	Other employees.
Spindle tester	Operates testing machine which determines whether spindles are running at proper speed.	Do.
Spinner	Operates machine which puts specified number of twists per inch in thread, which binds fibers together and gives more strength for manipulation. The number of twists varies with purpose for which yarn is to be used.	Spinners.
Spinner, S B	Takes 2 to 14 ends or strands of silk from bobbins and combines them into one, with 2½ to 12 twists to the inch.	Do.
Spool boy	(See Bobbin boy).	Bobbin boys.
Steamer	(See Ager operator).	Other employees.
Sticker (dyehouse)	Handles rods, or sticks on which skeins of yarn are suspended, works skeins back and forth in dye tanks, and turns them on the rods, thereby causing color to strike in uniformly.	Laborers, dyehouse.
Stitcher	Operates power sewing machine for stitching seams in bags, making smocks, marking fabrics, etc.	Other employees.
Stock boy	Helps stockman in handling materials, counting books, etc.	Do.
Stock checker	(See Stock clerk).	Do.
Stock clerk	Keeps record of inventory, stocks received and disposition of same.	Do.
Stockman	Has charge of silk vault where dyed and woven goods, also bales of raw silk are stored. Books are counted and skeins bundled and prepared for soaking. Records are kept of receipts and disposition of both raw and finished materials.	Do.
Stock tender	(See Raw-stock tender).	Do.
Stop-motion boy	(See Drop-wire boy).	Do.
Straightener, skeins	(See Silk snapper).	Do.
Stretcher, cloth	(See Cloth stretcher).	Do.
Stringer	Put strings or laces through skeins of yarn to hold them in proper shape while in degumming baths.	Do.

Factory term	Definition	Classified by bureau under—
Stripper (dyehouse).....	Places skeins of raw silk into "degumming" chemicals and works them around in tanks until necessary amount of gum has been removed from silk fibers.	Laborers, dyehouse.
Sweeper.....	Uses brooms or brushes to sweep factory floors and removes refuse.	Other employees.
Tankman, soap reclaiming.....	(See Soap reclaim tankman).....	Do.
Tentorer.....	(See Cloth stretcher).....	Do.
Tester.....	(See Silk tester).....	Do.
Tester's helper.....	Assists tester in ascertaining weights of skeins, twists per inch, and does any other work under his supervision.	Do.
Tester, spindles.....	(See Spindle tester).....	Do.
Tester, warp.....	(See Warp tester).....	Do.
Throwster, silk.....	(See Silk throwster).....	Do.
Tin weigher.....	(See Tinman, dyehouse).....	Do.
Tin whiz operator.....	Operates machine which adds tin and extracts surplus after time-limit fixation.	Do.
Tinman, dyehouse.....	Works at and around special weighting machine which rotates skeins or woven cloth through vat of tin or other weighting solution to add desired weight; places material into and takes it out of machine; makes tests of weighted goods to determine per cent of chemical gain, correct amount of tin or other weightings, temperature of bath, etc., all under supervision of dyer.	Do.
Transferer.....	(See Redrawer).....	Redrawers.
Truck driver.....	(See Trucker, power).....	Other employees.
Truck pusher.....	Operates hand truck for transferring goods from one department to another.	Do.
Trucker, power.....	Operates power truck for transporting materials about mill yard or from one department to another.	Do.
Tuber.....	Operates machine which winds spun yarn from bobbins on to paper tubes for use by weavers as welt or filling in loom shuttles.	Redrawers.
Tubman (dyehouse).....	(See Sticker, dyehouse; also Dye tubman).....	Laborers, dyehouse.
Twister mechanic.....	Repairs and maintains twisting machines in good working condition.	Other employees.
Twister.....	Operates machine for twisting two or more threads together into one, with 12 to 60 twists to the inch.	Spinners.
Twister-in, hand.....	Joins ends of new warp (which is ready for loom) to ends of old warp by twisting motion of the fingers.	Twisters-in, hand.
Twister-in, machine.....	Operates automatic machine which twists old and new warp ends together.	Twisters-in, machine.
Utility man.....	(See Handy man).....	Other employees.
Vaultman.....	(See Stockman).....	Do.
Warp brusher.....	(See Brusher, warp).....	Do.
Warp dresser.....	(See Slasher).....	Do.
Warp hanger.....	Lifts full beam from warping machine and replaces it with empty one. Also carries full warp beams to looms when needed by weavers.	Do.
Warp-machine fixer.....	Repairs and adjusts warping machines. (See Machine fixer.)	Do.
Warp sizer.....	(See Slasher).....	Do.
Warp tester.....	Inspects warp after sizing to determine if it is in proper condition for weaving.	Do.
Warper.....	Places spools or bobbins of organzine or warp threads on reel, for purpose of grouping specific number of desired length. The end of each thread is drawn through a rack having a series of glass pins for guiding thread to reed frame where it passes between blades or wires of frame to keep it separate and in proper place, and then is attached to the warping mill (a drum-like cylinder). This drum is operated by power. Constant watching is necessary to see that threads are wound evenly over surface of drum. The operator also repairs breaks, etc. Many warping machines are now provided with automatic devices which stop the machinery when a thread breaks.	Warpers.
Warper, direct.....	Operates machine which winds the warp direct from spools (bobbins) to warp beam of ribbon loom.	Do.
Warper, edge.....	Operates machine specially adapted to winding the warp for edges of ribbon and broad cloth.	Do.
Warper, hand.....	Tends warp-winding machine which is operated by hand.	Do.
Warper, ribbon.....	Operates machine which winds warp to beams of special design for weaving ribbon.	Do.
Waste collector.....	Collects sweepings from various departments and stores, same to be convenient for packing into bales.	Other employees.
Waste-paper baler.....	(See Paper baler).....	Do.

Factory term	Definition	Classified by bureau under—
Weaver, automatic. Weaver, broad-silk	(See Automatic weaver). Operates loom for weaving broad goods, watches loom to see that it is working properly, corrects defects in fabric before they are carried too far, pieces broken warp threads, and keeps shuttles filled. Most looms are provided with automatic devices which stop machinery when a thread breaks.	Weavers, broad-silk. Do.
Weaver, ribbon	Operates ribbon loom on which 5 to 100 ribbons are woven at the same time. The method of operation is similar to that of broad silk, except for added duties due to large number of shuttles to be kept filled.	Weavers, ribbon.
Weighters (dyehouse)	Makes tests of weighted goods to determine per cent of chemical gain, correct amount of tin or other weightings.	Other employees.
Weightmaster	Uses scales to weigh or check weights of yarns taken from various machines to determine earnings of piece workers.	Do.
Weighter, cloth	(See Tinman, dyehouse)	Do.
Weighter, pieces	do	Do.
Weighter, skeins	Immerse skeins in tank containing weighting solution such as tin, iron, gambin, etc., works them around in solution and removes them when properly weighted. May operate machines which are equipped with revolving arms which rotate skeins through bath.	Do.
Weighter, tin	(See Tinman, dyehouse)	Do.
Welder	Uses acetylene torch or electric-welding device to join metal parts.	Do.
Wet-silk hanger	(See Silk hanger)	Do.
Winder mechanic	Makes repairs or adjustments on winding machines.	Do.
Winder, hard silk	Operates machine for winding raw silk from skeins onto bobbins or spools. Constant watchfulness is necessary to mend broken threads and replace full bobbins with empty ones.	Winders, hard-silk.
Winder, rayon	Operates machine for winding rayon yarn from skeins onto bobbins or spools. The work is similar to that of winding hard and soft silk.	Winders, rayon.
Winder, ribbon	(See Ribbon winder)	Other employees.
Winder, skeins	(See Reeler)	Reelers.
Winder, soft-silk	Operates machines for winding onto bobbins or spools silk from which at least some of the natural gum has been removed and which may or may not have been spun or doubled. The winding is done in a similar manner as that of hard silk.	Winders, soft-silk.
Working foreman	(See Foreman, assistant)	Other employees.
Wrapper	Uses thin paper in which to wrap various woven goods for shipment.	Do.

LIST OF BULLETINS OF THE BUREAU OF LABOR STATISTICS

The following is a list of all bulletins of the Bureau of Labor Statistics published since July, 1912, except that in the case of bulletins giving the results of periodic surveys of the bureau only the latest bulletin on any one subject is here listed.

A complete list of the reports and bulletins issued prior to July, 1912, as well as the bulletins published since that date, will be furnished on application. Bulletins marked thus () are out of print.*

Conciliation and arbitration (including strikes and lockouts).

- *No. 124. Conciliation and arbitration in the building trades of Greater New York. [1913.]
- *No. 133. Report of the industrial council of the British Board of Trade on its inquiry into industrial agreements. [1913.]
- *No. 139. Michigan copper district strike. [1914.]
- *No. 144. Industrial court of the cloak, suit, and skirt industry of New York City. [1914.]
- *No. 145. Conciliation, arbitration, and sanitation in the dress and waist industry of New York City. [1914.]
- No. 191. Collective bargaining in the anthracite-coal industry. [1918.]
- *No. 198. Collective agreements in the men's clothing industry. [1918.]
- No. 233. Operation of the industrial disputes investigation act of Canada. [1918.]
- No. 255. Joint industrial councils in Great Britain. [1919.]
- No. 283. History of the Shipbuilding Labor Adjustment Board, 1917 to 1919.
- No. 287. National War Labor Board: History of its formation, activities, etc. [1921.]
- *No. 303. Use of Federal power in settlement of railway labor disputes. [1922.]
- No. 341. Trade agreement in the silk-ribbon industry of New York City. [1923.]
- No. 402. Collective bargaining by actors. [1926.]
- No. 468. Trade agreements, 1927.
- No. 481. Joint industrial control in the book and job printing industry. [1928.]

Cooperation.

- No. 313. Consumers' cooperative societies in the United States in 1920.
- No. 314. Cooperative credit societies (credit unions) in America and in foreign countries. [1922.]
- No. 437. Cooperative movement in the United States in 1925 (other than agricultural).
- No. 531. Consumers', credit, and productive cooperative societies, 1929.

Employment and unemployment.

- *No. 109. Statistics of unemployment and the work of employment offices in the United States. [1918.]
- *No. 172. Unemployment in New York City, N. Y. [1915.]
- *No. 183. Regularity of employment in the women's ready-to-wear garment industries. [1915.]
- *No. 195. Unemployment in the United States. [1916.]
- *No. 196. Proceedings of Employment Managers' Conference, held in Minneapolis, Minn., January 19 and 20, 1916.
- *No. 202. Proceedings of the conference of Employment Managers' Association of Boston, Mass., held May 10, 1916.
- No. 206. The British system of labor exchanges. [1915.]
- *No. 227. Proceedings of Employment Managers' Conference, Philadelphia, Pa., April 2 and 3, 1917.
- *No. 235. Employment system of the Lake Carriers' Association. [1918.]
- *No. 241. Public employment offices in the United States. [1918.]
- *No. 247. Proceedings of Employment Managers' Conference, Rochester, N. Y., May 9-11, 1918.
- *No. 310. Industrial unemployment: A statistical study of its extent and causes. [1922.]
- No. 409. Unemployment in Columbus, Ohio, 1921 to 1925.
- No. 542. Report of the Advisory Committee on Employment Statistics. [1931.]
- No. 544. Unemployment-benefit plans in the United States and unemployment insurance in foreign countries. [1931.]
- *No. 553. Fluctuations in employment in Ohio, 1914 to 1929.
- No. 555. Social and economic character of unemployment in Philadelphia, April, 1930.

Foreign labor laws.

- *No. 142. Administration of labor laws and factory inspection in certain European countries. [1914.]
- No. 494. Labor legislation of Uruguay. [1929.]
- No. 510. Labor legislation of Argentina. [1930.]
- No. 529. Workmen's compensation legislation of the Latin American countries. [1930.]
- No. 548. Labor legislation of Venezuela. [1931.]
- No. 554. Labor legislation of Paraguay. [1931.]
- No. 559. Labor legislation of Ecuador. [1931.]

Housing.

- *No. 153. Government aid to home owning and housing of working people in foreign countries. [1914.]
- No. 263. Housing by employers in the United States. [1920.]
- No. 295. Building operations in representative cities, 1920.
- No. 545. Building permits in principal cities of the United States in [1921 to] 1930.

Industrial accidents and hygiene.

- *No. 104. Lead poisoning in potteries, tile works, and porcelain-enameled sanitary ware factories. [1912.]
- No. 130. Hygiene of painters' trade. [1913.]

Wages and hours of labor—Continued.

- No. 305. Wages and hours of labor in the paper and pulp industry, 1923.
- No. 394. Wages and hours of labor in metalliferous mines, 1924.
- No. 407. Labor costs of production and wages and hours of labor in the paper box-board industry. [1925.]
- *No. 412. Wages, hours, and productivity in the pottery industry, 1928.
- No. 416. Hours and earnings in anthracite and bituminous coal mining, 1922 and 1924.
- No. 494. Wages and hours of labor of common street laborers, 1928.
- No. 499. History of wages in the United States from colonial times to 1926.
- No. 502. Wages and hours of labor in the motor-vehicle industry, 1928.
- No. 504. Wages and hours of labor in the hosiery and underwear industries, 1907 to 1928.
- No. 512. Wages and hours of labor in the iron and steel industry, 1929.
- No. 514. Pennsylvania Railroad wage data. From Report of Joint Fact Finding Committee in wage negotiations in 1927.
- No. 516. Hours and earnings in bituminous-coal mining, 1929.
- No. 522. Wages and hours of labor in foundries and machine shops, 1929.
- No. 523. Hours and earnings in the manufacture of airplanes and aircraft engines, 1929.
- No. 525. Wages and hours of labor in the Portland cement industry, 1929.
- No. 528. Wages and hours of labor in the furniture industry, 1910 to 1929.
- No. 532. Wages and hours of labor in the cigarette manufacturing industry, 1930.
- No. 533. Wages and hours of labor in woolen and worsted goods manufacturing, 1910 to 1930.
- No. 534. Labor conditions in the Territory of Hawaii, 1929-1930.
- No. 535. Wages and hours of labor in the slaughtering and meat-packing industry, 1929.
- No. 537. Wages and hours of labor in the dyeing and finishing of textiles, 1930.
- No. 539. Wages and hours of labor in cotton-goods manufacturing, 1910 to 1930.
- No. 546. Wages and hours in rayon and other synthetic textile manufacturing, 1930.
- No. 547. Wages and hours in cane-sugar refining industry, 1930.
- No. 551. Wages and hours of labor in the boot and shoe industry, 1910 to 1930.
- No. 557. Wages and hours of labor in the men's clothing industry, 1911 to 1930.
- No. 560. Wages and hours of labor in the lumber industry in the United States, 1930.
- No. 566. Union scales of wages and hours of labor, May 15, 1931.
- No. 567. Wages and hours of labor in the iron and steel industry, 1931. (In press.)

Welfare work.

- *No. 123. Employers' welfare work. [1913.]
- *No. 222. Welfare work in British munition factories. [1917.]
- *No. 250. Welfare work for employees in industrial establishments in the United States. [1919.]
- No. 458. Health and recreation activities in industrial establishments, 1926.

Wholesale prices.

- *No. 284. Index numbers of wholesale prices in the United States and foreign countries. [1921.]
- *No. 453. Revised index numbers of wholesale prices, 1923 to July, 1927.
- No. 543. Wholesale prices, 1930.

Women and children in industry.

- *No. 116. Hours, earnings, and duration of employment of wage-earning women in selected industries in the District of Columbia. [1913.]
- *No. 117. Prohibition of night work of young persons. [1913.]
- *No. 118. Ten-hour maximum working-day for women and young persons. [1913.]
- No. 119. Working hours of women in the pea canneries of Wisconsin. [1913.]
- *No. 122. Employment of women in power laundries in Milwaukee. [1913.]
- No. 160. Hours, earnings, and conditions of labor of women in Indiana mercantile establishments and garment factories. [1914.]
- *No. 167. Minimum-wage legislation in the United States and foreign countries. [1915.]
- *No. 175. Summary of the report on conditions of woman and child wage earners in the United States. [1915.]
- *No. 176. Effect of minimum-wage determinations in Oregon. [1915.]
- *No. 180. The boot and shoe industry in Massachusetts as a vocation for women. [1915.]
- *No. 182. Unemployment among women in department and other retail stores of Boston, Mass. [1916.]
- No. 193. Dressmaking as a trade for women in Massachusetts. [1916.]
- No. 215. Industrial experience of trade-school girls in Massachusetts. [1917.]
- *No. 217. Effect of workmen's compensation laws in diminishing the necessity of industrial employment of women and children. [1917.]
- *No. 222. Employment of women and juveniles in Great Britain during the war. [1917.]
- No. 253. Women in the lead industries. [1919.]
- No. 467. Minimum wage legislation in various countries. [1928.]
- No. 558. Labor conditions of women and children in Japan. [1931.]

Workmen's insurance and compensation (including laws relating thereto).

- *No. 191. Care of tuberculous wage earners in Germany. [1912.]
- *No. 192. British national insurance act, 1911.
- *No. 193. Sickness and accident insurance law in Switzerland. [1912.]
- No. 197. Law relating to insurance of salaried employees in Germany. [1913.]
- *No. 195. Compensation for accidents to employees of the United States. [1914.]
- *No. 212. Proceeding of the conference on social insurance called by the International Association of Industrial Accident Boards and Commissions, Washington, D. C., December 3-9, 1916.
- *No. 243. Workmen's compensation legislation in the United States and foreign countries, 1917 and 1918.
- No. 301. Comparison of workmen's compensation insurance and administration. [1923.]
- No. 312. National health insurance in Great Britain, 1911 to 1921.
- *No. 379. Comparison of workmen's compensation laws of the United States as of January 1, 1925.
- No. 477. Public-service retirement systems, United States and Europe. [1929.]
- No. 496. Workmen's compensation legislation of the United States and Canada as of January 1, 1929. (With text of legislation enacted in 1927 and 1928.)
- No. 529. Workman's compensation legislation of the Latin American countries. [1930.]

Miscellaneous series.

- *No. 174. Subject index of the publications of the United States Bureau of Labor Statistics up to May 1, 1915.
- No. 208. Profit sharing in the United States. [1916.]
- No. 242. Food situation in central Europe, 1917.

Miscellaneous series—Continued.

- No. 254. International labor legislation and the society of nations. [1919.]
No. 268. Historical survey of international action affecting labor. [1920.]
No. 282. Mutual relief associations among Government employees in Washington, D. C. [1921.]
No. 319. The Bureau of Labor Statistics: Its history, activities, and organization. [1922.]
No. 326. Methods of procuring and computing statistical information of the Bureau of Labor Statistics. [1923.]
No. 342. International Seamen's Union of America: A study of its history and problems. [1923.]
No. 346. Humanity in government. [1923.]
No. 372. Convict labor in 1923.
No. 386. Cost of American slumshouses. [1925.]
No. 398. Growth of legal-aid work in the United States. [1926.]
No. 401. Family allowances in foreign countries. [1926.]
No. 451. Labor organizations in Chile. [1928.]
*No. 465. Beneficial activities of American trade-unions. [1928.]
No. 479. Activities and functions of a State department of labor. [1928.]
No. 483. Conditions in the shoe industry in Haverhill, Mass., 1926.
*No. 489. Care of aged persons in the United States. [1929.]
No. 505. Directory of homes for the aged in the United States. [1929.]
No. 506. Handbook of American trade-unions: 1929 edition.
No. 518. Personnel research agencies. 1930 edition.
No. 541. Handbook of labor statistics. 1931 edition.
No. 558. Labor conditions of women and children in Japan. [1931.]
No. 561. Public old-age pensions and insurance in the United States and in foreign countries. [1932.]
No. 565. Park recreation areas in the United States, 1930.