

## **Manual database *Textile wages\_United States\_March 2024*\***

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\* This research was funded by the European Research Council (grant number 771288 [TextileLab]).

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## 1. Code Book

Variable	Variable name	Description
A	YEAR	The year in which the observed wage was earned.
B	LOC_1	First level indication of location (country).
C	LOC_2	Second level indication of location (state).
D	LOC_3	Third level indication of location (region).
E	TYPETEX	The type of textile (e.g. wool, cotton, flax, etc.).
F	OCCSOURCE	The occupational title as written down in the original source.
G	OCCSTAN	The standardized occupational title (interpretation of the author of the database). If possible, the author used the occupational title as given by HISCO.
H	HISCO	HISCO code
I	WAGE_SOURCE	The wage as listed in the source.
J	WAGE_TYPE	The type of wage (piece or time). NB: often when piece wage were included in the source, these weren't the piece rates, but rather the wage a piece laborer earned on average in a given amount of time.
K	WAGE_PERIOD	The time unit in which the wage was earned (day/week/month/year).
L	WAGE_HOURS	The number of hours that was worked in the period specified under WAGE_TIME. NB: in case WAGE_TIME is 'hour', this column either lists the number of hours worked on a weekly basis or there is no information.
M	WAGE_CURR	Currency of the wage.
N	LAB_SEX	Sex of the laborer.
O	LAB_N	The number of laborers on which the average wage listed in the source was based.
P	EST_N	The number of establishments on which the average wage listed in the source was based.
Q	SOURCE	Reference to the original source including page number.
R	REMARKS	Any additional remarks.

## 2. Sources

### 2.1. List of sources

The data are taken from the reports by the Bureau of Labor Statistics:

1. US Department of Labor, *Wages and hours of labor in the cotton, woolen, and silk industries 1890 to 1912* (Washington 1913).
2. US Department of Labor, *Wages and hours of labor in the cotton, woolen, and silk industries 1907 to 1913* (Washington 1914).
3. US Department of Labor, *Wages and hours of labor in the cotton, woolen, and silk industries 1907 to 1914* (Washington 1916).
4. US Department of Labor, *Wages and hours of labor in the cotton-goods manufacturing and finishing, 1916* (Washington 1918).
5. US Department of Labor, *Wages and hours of labor in the cotton-goods manufacturing and finishing, 1918* (Washington 1919).
6. US Department of Labor, *Wages and hours of labor in cotton-goods manufacturing, 1920* (Washington 1921).
7. US Department of Labor, *Wages and hours of labor in cotton-goods manufacturing, 1922* (Washington 1923).
8. US Department of Labor, *Wages and hours of labor in cotton-goods manufacturing, 1924* (Washington 1925).
9. US Department of Labor, *Wages and hours of labor in cotton-goods manufacturing, 1910 to 1930* (Washington 1931).
10. US Department of Labor, *Wages and hours of labor in the dyeing and finishing of textiles, 1930* (Washington 1931).
11. US Department of Labor, *Wages and hours of labor in the dyeing and finishing of textiles, 1932* (Washington 1933).

## 2.2. Description of the sources

(1) US Department of Labor, Wages and hours of labor in the cotton, woolen, and silk industries 1890 to 1912 (Washington 1913)

The report lists the collected wage data in various ways. For cotton goods manufacturing we used *Table II – Classified rates of wages per hour in each year, by States, 1907 to 1912*. “It shows for each of the principal occupations the number of employees earning each classified rate of wages per hour. Under each year, 1907 to 1912, or for such of these years as data are available, the data are shown for each of the States represented by any considerable number of employees. In addition to classified rates of wages, average rates of wages per hour and average nominal full-time hours per week are shown” (p. 26). For cotton-goods finishing we used *Table VIII – Classified rates of wages per hour in each year, by States, 1911 and 1912*. “It shows for each of the principal occupations the number of employees earning each classified rate of wages per hour. Under each year, 1911 and 1912, the data are shown for each State. In addition to classified rates of wages, average rates of wages per hour and average nominal full-time hours per week are shown (pp. 28-29). For woolen and worsted goods manufacturing we used *Table II – Classified rates of wages per hour in each year, by States, 1907 to 1912*, of which the description (p. 130) is roughly the same as for the used table for cotton goods manufacturing.

Every observation in the database includes the following information directly taken from the source:

- state
- occupation
- sex of the laborer
- number of establishments
- number of employees
- average nominal fulltime hours per week
- average rate of wages per hour

The given wages are based on both time and piece rates. In the explanation of another table the following is mentioned: “The rate of wages per hour was computed for each employee in the case of time workers by dividing the daily or weekly rate by the number of hours per day or week; and in the case of pieceworkers and those working both as time workers and pieceworkers by dividing the amount earned during the pay-roll period by the hours actually worked” (p. 26). We assume the same goes for Tables II, VII as the various tables show the same data in different ways.

All the states with, according to the United States Census of Manufacturers, more than 5,500 employees in the cotton good manufacturing industry have been included in this investigation, namely: Massachusetts, South Carolina, North Carolina, Georgia, Rhode Island, New Hampshire, Pennsylvania, Connecticut, Maine, Alabama, and New York. For woolen and worsted manufacturing all the states with more than 2,500 employees have been included, namely: Massachusetts, Pennsylvania, Rhode Island, Maine, New Jersey, Connecticut, New York, and New Hampshire. The table below shows the total US labor force and the number of laborers included in the report (nominal and relative) in cotton-goods manufacturing and woolen and worsted goods manufacturing.

*Table 1. Representativity 1913 report*

	<i>Cotton-goods manufacturing*</i>	<i>Woolen and worsted goods manufacturing</i>
Total labor force US 1910 (N)	371,182	163,192
Included in the report (N)	35,811	17,505
Included in the report (%)	9.6%	10.7%

\* Excluding cotton goods finishing

Source: pp. 16, 120.

(2) US Department of Labor, Wages and hours of labor in the cotton, woolen, and silk industries 1907 to 1913 (Washington 1914)

For cotton goods manufacturing we have used *Table VII – Average full-time hours of work per week and average full-time weekly earnings, by States, 1912 and 1913* and for cotton-goods finishing *Table XIV – Average full-time hours of work per week and average full-time weekly earnings, by States, 1912 and 1913*. For woolen and worsted goods manufacturing we used *Table VII – Average full-time hours of work per week and average full-time weekly earnings, by States, 1912 and 1913*.

Every observation in the database includes the following information directly taken from the source:

- state
- occupation
- sex of the laborer
- number of establishments
- number of employees
- average full-time hours per week
- average full-time weekly earnings

Only states with a sizeable labor forces were included. For cotton this was more than 6,500 and for wool 2,500 as listed in the 1910 US census. The table below shows the total US labor force and the number of laborers included in the report (nominal and relative) in cotton-goods manufacturing and woolen and worsted goods manufacturing.

*Table 2. Representativity 1914 report*

	<i>Cotton-goods manufacturing*</i>	<i>Woolen and worsted goods manufacturing</i>
Total labor force US 1910 (N)	371,182	163,192
Included in the report (N)	35,913	15,620
Included in the report (%)	9.7%	9.6%

\* Excluding cotton goods finishing

Source: pp. 21, 103.

(3) US Department of Labor, Wages and hours of labor in the cotton, woolen, and silk industries 1907 to 1914 (Washington 1916)

For cotton goods manufacturing we have used *Table III – Average and classified rates of wages per hour, for pieceworkers and timeworkers, by States, 1914* and for cotton-goods finishing *Table X - Average and classified rates of wages per hour, for pieceworkers and timeworkers, by States, 1914*. For woolen and worsted goods manufacturing we used *Table III – Average and classified rates of wages per hour, for pieceworkers and timeworkers, by States, 1914*. This means that the researcher using the database can make an explicit distinction between laborer who worked for piece rates and those who worked for time rates. Note that in the column for piece and time rates, often ‘do.’ was listed. We assumed this stands for ‘ditto’ and is thus the same as the row above. We therefore entered ‘piece’ or ‘time’ instead of ‘do.’ in the database.

Every observation in the database includes the following information directly taken from the source:

- state
- occupation
- sex of the laborer
- pieceworkers or timeworkers
- number of establishments
- number of employees
- average full-time hours per week
- average rates of wages per hour

Only states with a sizeable labor forces were included. For cotton this was more than 10,000 as listed in the 1910 US census and for wool the cutoff point is unclear. The table below shows the total US labor force and the number of laborers included in the report (nominal and relative) in cotton-goods manufacturing and woolen and worsted goods manufacturing.

Table 3. Representativity 1916 report

	<i>Cotton-goods manufacturing*</i>	<i>Woolen and worsted goods manufacturing</i>
Total labor force US 1910 (N)	378,880**	168,722**
Included in the report (N)	79,659	39,665
Included in the report (%)	21.0%	23.5%

\* Excluding cotton goods finishing

\*\* This number is higher than the number given in the reports from 1914 and 1916. The reason for this discrepancy remains unclear.

Source: pp. 34, 136.

(4) US Department of Labor, Wages and hours of labor in the cotton-goods manufacturing and finishing, 1916 (Washington 1918)

This report only includes wages in the cotton goods manufacturing and finishing industry. For cotton goods manufacturing we used *Table D – Average full-time hours, hours actually worked, full-time weekly earnings and amounts actually earned, and number of employees working each classified per cent of full-time and earning each classified amount, during one pay-roll period, for pieceworkers and timeworkers, by States, 1916* and for cotton-goods finishing *Table H* with the same name. We chose to enter the information on fulltime earnings for the sake of consistency with the reports of previous years. Moreover, dividing the fulltime wage by the fulltime number of hours worked would yield the same result as dividing the actual wage by the actual number of hours worked. The actual wage and working hours are generally somewhat lower than the fulltime wage and working hours. The definition of full-time hours per week given in the report is “the regular hours during which, under normal conditions, employees in an occupation are on duty” (p. 30).

Note that some establishments had one-week payrolls and others two-week payrolls. Therefore, part of the observations of average wages (column WAGE\_SOURCE) and working hours (column WAGE\_HOURS) in the database are based on a two-week period. This is specified in column WAGE\_PERIOD. In the report, the columns in the tables for the establishments with two-week payrolls are named ‘average full time hours per week’ and ‘average fulltime weekly earnings’. This is confusing, but seeing that the working hours could never represent one work week, we assume these column’s names have simply not been adjusted to the two-week payroll establishments.

Piece wages were converted into hourly earnings: “the rates of wages per hour appearing in the tables include the wages of timeworkers and the earnings of pieceworkers. All time rates not already on an hourly basis have been reduced to rates per hour, and the earnings of pieceworkers and of persons working at both time and piece rates have been reduced to rates per hour by dividing the earnings by the hours worked” (pp. 30-31).

Every observation in the database includes the following information directly taken from the source:

- state

- occupation
- sex of the laborer
- pieceworkers or timeworkers
- number of establishments
- number of employees
- average full-time hours per week [or two weeks] of establishments
- average full-time weekly [or biweekly] earnings

Only states with a sizeable labor forces were included. The cutoff point is, however, unclear. The table below shows the total US labor force in cotton-goods manufacturing and the number of laborers included in the report (nominal and relative).

*Table 4. Representativity 1918 report*

	<i>Cotton-goods manufacturing*</i>
Total labor force US 1910 (N)	378,880**
Included in the report (N)	86,159
Included in the report (%)	22.7%

\* Excluding cotton goods finishing

\*\* See notes Table 3.

Source: p. 30.

(5) US Department of Labor, Wages and hours of labor in the cotton-goods manufacturing and finishing, 1918 (Washington 1919)

This report only includes wages in the cotton goods manufacturing and finishing industry. For cotton goods manufacturing we used *Table D – Average full-time hours, hours actually worked, full-time weekly earnings and amounts actually earned, and number of employees working each classified per cent of full-time and earning each classified amount, during one pay-roll period, for pieceworkers and timeworkers, by States, 1918* and for cotton-goods finishing *Table H* with the same name. For more information about the definition of full-time work, biweekly payrolls, and the calculations of piece wages, see source (4) above.

Every observation in the database includes the following information directly taken from the source:

- state
- occupation
- sex of the laborer
- pieceworkers or timeworkers
- number of establishments
- number of employees
- average full-time hours per week [or two weeks] of establishments
- average full-time weekly [or biweekly] earnings

Only states with a sizeable labor forces were included. The cutoff point is, however, unclear. The table below shows the total US labor force in cotton-goods manufacturing and the number of laborers included in the report (nominal and relative).

*Table 5. Representativity 1919 report*

	<i>Cotton-goods manufacturing</i>
Total labor force US 1910 (N)	378,880**
Included in the report (N)	81,121
Included in the report (%)	21.4%

\* See notes Table 3.

Source: p. 27.

(6) US Department of Labor, Wages and hours of labor in cotton-goods manufacturing, 1920 (Washington 1921)

We have used *Table C – Average and classified hours actually worked and average fulltime hours, and classified per cent of full time, of piece workers and time workers, actually worked in one week and in two weeks, by occupation, sex, and State, 1920*. For more information about the definition of full-time work, biweekly payrolls, and the calculations of piece wages, see source (4) above.

Every observation in the database includes the following information directly taken from the source:

- state
- occupation
- sex of the laborer
- pieceworkers or timeworkers
- number of establishments
- number of employees
- average full-time hours per week [or two weeks] of establishments
- average full-time weekly [or biweekly] earnings

The table below shows the total US labor force in cotton-goods manufacturing and the number of laborers included in the report (nominal and relative).

*Table 6. Representativity 1921 report*

	<i>Cotton-goods manufacturing</i>
Total labor force US 1914 (N)	379,366*
Included in the report (N)	59,565
Included in the report (%)	15.7%

\* This number does not seem to include every single State. According to the source, 'other states' (besides the ones extensively investigated) include Arkansas, Delaware, Illinois, Indiana, Kentucky, Louisiana, Maryland, Michigan, Mississippi, Missouri, New Jersey, Ohio, Tennessee, Texas, Vermont, and Wisconsin.

Source: p. 16.

(7) US Department of Labor, Wages and hours of labor in cotton-goods manufacturing 1922 (Washington 1923)

We have used *Table A – Earnings and hours, by occupation, sex, and State, 1922*. For more information about the definition of full-time work and biweekly payrolls, see source (4) above. This report does not give separate information about pieceworkers and timeworkers but instead combines the two types of wages.

Every observation in the database includes the following information directly taken from the source:

- state
- occupation
- sex of the laborer
- number of establishments
- number of employees
- average full-time earnings per week
- average full-time hours per week

The table below shows the total US labor force in cotton-goods manufacturing and the number of laborers included in the report (nominal and relative).

*Table 7. Representativity 1923 report*

	<i>Cotton-goods manufacturing</i>
Total labor force US 1919 (N)	430,966
Included in the report (N)	62,833
Included in the report (%)	14.6%

Source: p. 12.

(8) US Department of Labor, Wages and hours of labor in cotton-goods manufacturing, 1924 (Washington 1925)

We have used *Table A – Average earnings per hour and full-time earnings per week, and average and classified full-time hours per week, 1924, by occupation, sex, and State*. For more information about the definition of full-time work, see source (4) above. This report does not give separate information about pieceworkers and timeworkers but instead combines the two types of wages.

Every observation in the database includes the following information directly taken from the source:

- state
- occupation
- sex of the laborer
- number of establishments
- number of employees
- average full-time earnings per week

- average full-time hours per week

The table below shows the total US labor force in cotton-goods manufacturing and the number of laborers included in the report (nominal and relative).

*Table 8. Representativity 1925 report*

	<i>Cotton-goods manufacturing</i>
Total labor force US 1921 (N)	412,058
Included in the report (N)	77,995
Included in the report (%)	18.9%

Source: p. 12.

(9) US Department of Labor, Wages and hours of labor in cotton goods manufacturing, 1910 to 1930 (Washington 1931)

We have used *Table A – Average number of days on which employees worked, average full-time and actual hours and earnings per week, average earnings per hour, and per cent of full time worked, 1930, by occupation, sex, and State*. This report does not give separate information about pieceworkers and timeworkers but instead combines the two types of wages. Full-time hours were “computed by dividing the combined full-time hours per week of all employees in the occupation by the number of employees in the occupation in one week” (p. 27). This report does not give separate information about pieceworkers and timeworkers but instead combines the two types of wages.

Every observation in the database includes the following information directly taken from the source:

- state
- occupation
- sex of the laborer
- number of establishments
- number of employees
- average full-time hours per week
- average full-time earnings per week

The table below shows the total US labor force in cotton-goods manufacturing and the number of laborers included in the report (nominal and relative).

*Table 9. Representativity 1931 report (manufacturing)*

	<i>Cotton-goods manufacturing</i>
Total labor force US 1927 (N)	467,596
Included in the report (N)	90,053
Included in the report (%)	19.3%

Source: p. 27.

(10) US Department of Labor, Wages and hours of labor in the dyeing and finishing of textiles, 1930 (Washington 1931)

We have used *Table A – Average number of days on which employees worked, average full-time and actual hours and earnings per week, average earning per hour, and per cent of full time worked, 1930, by occupation, sex, and State*. For more information about fulltime hours see the description of source (9) above. The majority of the included laborers was involved in the dyeing and finishing of cotton textiles (p. 11).

Every observation in the database includes the following information directly taken from the source:

- state
- occupation
- sex of the laborer
- number of establishments
- number of employees
- average full-time hours per week
- average full-time earnings per week

The table below shows the total number of wage earners in dyeing and finishing textiles and the number of laborers included in the report (nominal and relative).

*Table 10. Representativity of 1931 report (dyeing and finishing)*

	<i>Dyeing and finishing textiles</i>
Total labor force US 1927 (N)	73,851
Included in the report (N)	21,482
Included in the report (%)	29.1%

Source: p. 11.

(11) US Department of Labor, Wages and hours of labor in the dyeing and finishing of textiles, 1932 (Washington 1933)

We have used *Table A – Average number of days on which wage earners worked, average full-time and actual hours and earnings per week, average earnings per hour, and percent of full time worked, 1932, by occupation, sex and State*. For more information about fulltime hours see the description of source (9) above. The majority of the included laborers was involved in the dyeing and finishing of cotton textiles (p. 18).

Every observation in the database includes the following information directly taken from the source:

- state
- occupation
- sex of the laborer
- number of establishments
- number of wage earners

- average full-time hours per week
- average full-time earnings per week

The table below shows the total number of wage earners in dyeing and finishing textiles and the number of laborers included in the report (nominal and relative).

*Table 11. Representativity of 1933 report*

	<i>Dyeing and finishing textiles</i>
Total labor force US 1929 (N)	79,327
Included in the report (N)	19,246
Included in the report (%)	24.3%

Source: p. 19.

### 3. Occupations

A great variety of occupations has been included in this database. As mentioned in the code book above, column F in the database lists the occupational title as it was listed in the source and column G lists a standardized occupational title, for which we used the Historical International Classification of Occupations (HISCO). HISCO was developed to facilitate regional and temporal research on the history of labor by coding and describing occupations.

Every observation in the database was assigned a HISCO code, but the user of the database should take several things into consideration. First, the occupations as identified by HISCO could often be broken down into multiple separate occupations. For instance, the process of carding fibre was broken down into several smaller tasks. Usually, these various tasks also differed in terms of skill-level and remuneration. Second, all the codes ending with 90 are a category with occupations within a larger category that were not classified elsewhere in that category. For instance, the category of 'Other Bleachers, Dyers and Textile Product Finishers' contains many occupations that were not individually coded within the group of bleachers, dyers and textile product finishers. Third, to some extent assigning a HISCO code to an occupational title is a matter of interpretation. For instance, "sewers" are now assigned code 79510 (Hand and Machine Sewers, General), but the sewers included in this database were responsible for sewing together pieces of finished cloth, which means they could also have been given code 75690 (Other Bleachers, Dyers and Textile Finishers).

In what follows, we give an overview of the included HISCO codes and the occupational titles that have been assigned that HISCO code. We also provide an description of occupations where this is needed. For these descriptions we used publications from the US Department of Labor.

#### 3.1. *Included HISCO groups and occupations*

75000: Spinners, Weavers, Knitters, Dyers and Related Workers, Specialisation Unknown

**HISCO description:** Workers in this unit group may perform any (but not all) of the occupational activities described in minor group 7-5.

**Included occupations:**

- Other employees.

75115: Fibre Grader and Classer

**HISCO description:** Grades and classifies natural textile fibres.

**Included occupations:**

- Wool sorter. This person opens the bags of raw wool and sorts the fleeces according to the grade of wool (United States Department of Labor 1913, p. 128).

75130: Fibre Picker

**HISCO description:** Operates picker machines which clean and fluff textile fibres.

**Included occupations:**

- Picker tenders. This person places cotton into a picker machine and takes the rolls of clean cotton (can tender) out of the machine, “weighs each roll, and turns regulating screws when necessary to adjust the machines so that rolls of cotton of uniform weight will be produced” (United States Department of Labor 1939, pp. 21-3). This job is sometimes separated into two jobs: picker feeders (placing the cotton into the machine) and picker doffers (taking de laps out of the machine and inspecting them).

#### 75135: Fibre Carder

**HISCO description:** Operates carding machine which cleans fibres and transforms them from loosely matted layers (lap) into untwisted strand (sliver).

**Included occupations:**

- Card grinder. “Repairs, overhauls, and adjusts Carding Engines; sharpens (grinds) the wire teeth on the drums and flats of the Carding Machine; works under the general supervision of ASSISTANT OVERSEER; supervises the work of CARD TENDERS, CARD STRIPPER, and CAN MAN in his section” (United States Department of Labor 1935, p. 57).
- Card strippers. This person operates a machine that “cleans out the cotton fibres adhering to the teeth of the carding and doffing drums of carding machines” (United States Department of Labor 1939, p. 41).
- Card tenders. They place laps (roles of cleaned cotton) into the carding machines.
- Card tenders and strippers. In several reports, the wages of card tenders and card strippers have been combined.
- Carding-machine tenders.

#### 75145: Fibre Comber

**HISCO description:** Operates machine which combs out short fibres, removes dirt and delivers long fibres in a sliver for first drawing (twisting).

**Included occupations:**

- Combers.

#### 75150: Fibre Drawer

**HISCO description:** Operates drawing frame machine which combines several strands of sliver into one attenuated strand of regular quality and weight.

**Included occupations:**

- Drawing tenders. Operates a drawing frame, which combines strands of sliver into one bigger strand (United States Department of Labor 1939, p. 59).
- Drawing-frame tenders. See drawing tenders.

#### 75155: Fibre Rover

**HISCO description:** Operates roving frame machine which transforms sliver into roving.

**Included occupations:**

- Slubber tender. This person operates a slubbing machine. Slubbing is part of the process of transforming sliver into roving (Job specifications 1935, p. 45). “The job

results in the production of loosely twisted cotton strands of sufficient strength to be processed on the fly frames without too frequent breakage” (United States Department of Labor 1939, p. 65).

- Speeder tenders. They operate a fly frame “that combines and draws two strands of roving into one equal size to either of the two producing it, twisting the roving slightly in the process” (United States Department of Labor 1935, p. 49).

#### 75220: Spinner, Thread and Yarn

**HISCO description:** Operates machines to spin thread and yarn from roving on to spindles or other output packages.

**Included occupations:**

- Spinners, frame. This person operates a ring spinning machine.
- Spinners, mule. This person operates a spinning mule.

#### 75240: Twister

**HISCO description:** Operates machine which twists two or more strands of yarn or thread into a single heavier and stronger strand.

**Included occupations:**

- Fine speeders. This person operates a machine that combines, draws, and twists roving. NB: this is done *before* the actual spinning process starts. Therefore, fine speeders are part of the group of fibre preparers rather than the group of spinners and winders.
- Twisters.
- Twister tenders.

#### 75250: Winder

**HISCO description:** Operates machine which winds yarn or thread from one package to another to facilitate further processing or transportation.

**Included occupations:**

- Yarn winder.
- Spooler tenders. This person “operates machines that winds yarn from bobbins onto spools, cheeses, and cones” (United States Department of Labor 1935, p. 105).

#### 75290: Other Spinners and Winders

**HISCO description:** This group includes spinners and winders not elsewhere classified, for example those who perform auxiliary operations in spinning and winding.

**Included occupations:**

- Doffers. A doffer removes “full bobbins of yarn from the hundred or more spindles of spinning frames and twisting machines, replaces full bobbins with empty ones, and starts yarn on empty bobbins to prepare machine for another cycle of operation” (United States Department of Labor 1939, p. 105). NB: the term doffer is also used for jobs in other parts of the production process, such as picker doffers (see fibre pickers

above). It is not completely clear whether all the observations of doffers' wages in the database relate to the spinning process.

75320: Loom Fixer

**HISCO description:** Sets, inspects and repairs looms of various kinds.

**Included occupations:**

- Loom fixers.

75415: Beam Warper

**HISCO description:** Operates machine which winds yarn or thread from bobbins directly onto weaver's beam, or onto cylinder or reel and then onto beam.

**Included occupations:**

- Beamer tenders.
- Warper tenders. This person "operates a machine for winding beams or 'balls' of warp from spools or cheeses" (United States Department of Labor 1935, p. 113).

75420: Loom Threader (Hand)

**HISCO description:** Draws warp thread or yarn into loom by hand, in preparation for weaving of fabric.

**Included occupations:**

- Drawers-in, hand. This person "rapidly, deftly, and accurately draws the individual ends (strands) of warp yarn from a large spool (warp beam) through the drop wires, harnesses, and reeds of a loom, and ties them together in small groups, to prevent their slipping out" (United States Department of Labor 1939, p. 151).

75422: Loom Threader (Hand or Machine)

**HISCO description:** Draws warp thread into loom by hand (7-54.20) or machine (7-54.25) in preparation for weaving.

**Included occupations:**

- Drawers-in. See the description of drawers-in, hand. For drawers-in it is not specified whether they performed their work by hand or with help of a machine.

75432: Cloth Weaver (Hand or Machine)

**HISCO description:** weaves cloth by hand (7-54.30) or machine (7-54.40).

**Included occupations:**

- Weavers.

75470: Fabrics Examiner

**HISCO description:** Examines textile fabrics for faults.

**Included occupations:**

- Inspector. A cloth inspector examines "cloth after it is opened and before it is put through any process" (United States Department of Labor 1933, p. 57).

- Trimmers and inspectors. Trimmers trim cloth to remove loosely hanging threads (United States Department of Labor 1939, p. 203).

#### 75475: Fabrics Repairer

**HISCO description:** Repairs faults in textile fabrics.

**Included occupations:**

- Burlers. They “remove the knots from cloth” (United States Department of Labor 1914, p. 106).
- Menders. They “take the cloth and [...] examine it for broken threads and dropped threads, which they sew in with a needle and thread, and for torn places or imperfections, which they mend” (United States Department of Labor 1914, p. 110).

#### 75490: Other Weavers and Related Workers

**HISCO description:** This group includes weavers and related workers not elsewhere classified, for example those who perform auxiliary operations in weaving processes.

**Included occupations:**

- Creelers. This is “changing the empty spools in the creel for the full ones, the warper being stopped while the creeling is done” (United States Department of Labor 1918, p. 171). NB: the term creeler is used for jobs in several parts of the production process. It is not always clear to what kind of creeler the term refers.
- Creelers or tiers-in. See description of ‘creelers’ above.
- Smash hands. “Ties strands of warp yarn in the loom when a large number break at one time, in order to relieve the WEAVER of this operation which would interfere with production of the other looms under his care” (United States Department of Labor 1939, p. 187).
- Warp-tying machine tenders. This person “operates a machine which ties the ends of warp from a full loom beam to ends of warp from an exhausted loom beam” (United States Department of Labor 1935, p. 145).

#### 75615: Textile Bleacher

**HISCO description:** Treats fibres, yarn, cloth or other textile goods to make them lighter in colour.

**Included occupations:**

- Bath mixer. This person “looks after mixing chemicals used in bleaching (United States Department of Labor 1933, p. 48).
- Kier boilers. Operates kiers, which are used for “treating or bleaching cloth that requires a long period of time” (United States Department of Labor 1933, p. 58).
- Laborers, bleach house. It is not clear what specific type of work the people with this occupational title performed, but seeing that they worked in the bleach house, they were classified as textile bleachers.
- Plaiters. “Plaits down rope of cloth either in a pit or bin or in a large iron receptacle known as a kier for purpose of bleaching. A wince overhead draws cloth and it falls down into pit or kier. Plaiter directs fall of cloth with wooden stick, causing cloth to lie

in laps, forming uniform layers, so it will not tangle when coming out and, if in a kier, so liquor can readily circulate through it” (United States Department of Labor 1933, p. 62).

#### 75622: Yarn, Fabric or Garment Dyer

**HISCO description:** Treats yarn (7-56.20), textile fabric (7-56.25) or garment (7-56.30) with dyes to give it required colour.

**Included occupations:**

- Ager tenders. This person operates an ager machine, “which is used for treating cloth with steam or ammonia when only a short period is necessary for developing and fixing dye or mordant used for setting color” (United States Department of Labor 1933, p. 47).
- Back tenders. This person “works at rear of dyeing machine to see that cloth comes from the machine properly” (United States Department of Labor 1933, p. 47).
- Color mixers. They prepare the dye to make sure it has to right color (United States Department of Labor 1933, p. 52).
- Dyeing-machine tenders. This person operates a machine that dyes cloth.
- Kettleman, color mixing. Prepares the color mix used for dyeing (United States Department of Labor 1933, p. 58).
- Kettleman’s helpers. Assists a kettleman.
- Laborers, color mixing.
- Laborers, dyehouse.

#### 75635: Textile Washer

**HISCO description:** Treats yarn, cloth or finished goods to remove impurities or excess chemicals.

**Included occupations:**

- Soap mixers. They fill “large mixing tanks with water and measures in definite quantities of powdered soap, soda ash, and other ingredients” (United States Department of Labor 1933, p. 67).
- Soaper tender.
- Washer tenders. They clean cloth before its bleached (United States Department of Labor 1933, p. 71).

#### 75670: Textile Calender Operator

**HISCO description:** Operates machine in which textiles are pressed, stretched or given lustre or waterproof or other type of finish by means of friction, heating and rolling.

**Included occupations:**

- Calender tender.
- Calenders.
- Mangle tenders. They operate mangles with the purpose of stretching textiles (United States Department of Labor 1933, p. 59).

- Sprinklers. They prepare cloth for the calendering process by operating a machine that moisturizes the cloth (United States Department of Labor 1933, p. 68). They are also called Batchers or Cloth Winders. Technically, sprinklers, batchers, and cloth winders are not calender operators. However, as they performed work directly related to calendering, they were included in this category.
- Tenter-frame tenders. This person operates a tenter-frame, which stretches cloth (United States Department of Labor 1933, p. 69).

#### 75690: Other Bleachers, Dyers and Textile Product Finishers

**HISCO description:** This group includes bleachers, dyers and textile product finishers not elsewhere classified, for example those who dye unspun fibres, hosiery or knitwear; disentangle skeins of yarn after washing, bleaching, dyeing or other treatment; dry materials at any stage of treatment; remove fibre protrusions; stretch textile goods; press made-up goods; re-waterproof used goods; or size the warp.

#### **Included occupations:**

- Balers. This person bales cloth.
- Batchers (cloth winder). They operate “machine used for winding any length of cloth around a roller” (United States Department of Labor 1933, p. 48).
- Die makers. This person “engraves by hand one repeat of a given design on a small solid cylindrical roller of softened steel” (United States Department of Labor 1933, p. 53).
- Dressers. They size “warp yarn by running it through a sizing solution of starch” (United States Department of Labor 1914, p. 108). Sizing is part of the process of making yarn strong enough to be warp.
- Drier tenders. They operate drying cans to dry cloth (United States Department of Labor 1933, p. 53).
- Engravers. They “cut accurate designs on copper rollers which are used for printing cloth” (United States Department of Labor 1933, p. 55).
- Folders. They neatly fold cloth to make it ready for transport (United States Department of Labor 1933, p. 56).
- Jackman, printing. They move around copper rollers (United States Department of Labor 1933, p. 58).
- Knotters. They “put stitches [...] through selvages of top and bottom plies of each end of folder cloth so that it remains as folded” (United States Department of Labor 1933, p. 58).
- Measurers. They operate “hooker or other measuring machine to determine length of cloth for each job to be run through dyeing or finishing plant” (United States Department of Labor 1933, p. 60).
- Mercerizers. They operate a machine that gives cloth “a luster similar to that of silk” (United States Department of Labor 1933, p. 60).
- Openers. They open up bales of cloth and “places them in position for inspector [...]” (United States Department of Labor 1933, p. 60).
- Packers. They pack folded cloth and moves it to shipping or storage departments (United States Department of Labor 1933, p. 60).

- Pilers. “Watches cloth as it comes from back of any machine where swing folding attachment is used. Keeps it packed down and properly arranged as it falls loosely on truck and removes truck, replacing it with an empty one” (United States Department of Labor 1933, p. 62).
- Polishers. They handle a copper roller used in the printing process (United States Department of Labor 1933, p. 62).
- Printers. They operate printing machines (United States Department of Labor 1913, pp. 24-5).
- Printing machine tenders.
- Roller turners. Operate machines that turn large copper rollers (United States Department of Labor 1933, p. 64).
- Scutcher tenders. They operate a machine that opens cloth “to its full width after it has been bleached, dyed, or otherwise processed in rope form” (United States Department of Labor 1933, p. 65).
- Singers. They operate “a singeing machine which burns nap of cloth” (United States Department of Labor 1933, p. 66).
- Slashers/slasher tenders. Slashing is part of the process of transforming yarn into warp.
- Steamer tenders. Steams cloth (United States Department of Labor 1933, p. 68).
- Swing tenders. They watch “cloth, keeps it packed down and properly arranged as it comes from back of any machine where swing-folding attachment is used, thus folding it loosely on truck; moves each full truck away and replaces it with an empty one, tearing off cloth to start a new batch” (United States Department of Labor 1933, p. 69).
- Tub washers. They wash the tubs used for mixing colors etc. (United States Department of Labor 1933, p. 70).

75990: Other Spinners, Weavers, Knitters, Dyers and Related Workers

**HISCO description:** This group includes spinners, weavers, knitters, dyers and related workers not elsewhere classified, for example those who harden and shrink hat forms or make wool felt sheeting.

**Included occupations:**

- Floormen. They assist wherever there is any heavy lifting to be done, as handling rollers for engravers and printers, setting up heavy rolls of cloth for female operators, etc. (United States Department of Labor 1933, p. 56).
- Truckers. They move all kinds of things around within or between departments (United States Department of Labor 1933, p. 70).

79510: Hand and Machine Sewer, General

**HISCO description:** Performs various hand- and machine-sewing tasks in making, altering and repairing articles of textile and kindred materials.

**Included occupations:**

- Sewers. This person “sews together, in various departments, cuts or pieces of cloth or ends of rolls to make a continuous run of cloth of desired length” (United States Department of Labor 1933, p. 66).

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