B 456560

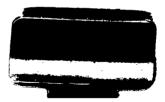
K 2 v www.libtool.com.cn

General Library

----OF----

UNIVERSITY OF MICHIGAN.

Chip of Bureon of Statistics Onor 4 180 >



10 C

THE

67219

ANNUAL STATISTICS

OF

MANUFACTURES.

1896.

ELEVENTH REPORT.

BOSTON:

WRIGHT & POTTER PRINTING CO., STATE PRINTERS, 18 POST OFFICE SQUARE. 1897.

Commonwealth of Massachusetts.

BUREAU OF STATISTICS OF LABOR, CLAPLIN BUILDING, 20 BEACON STREET, BOSTON, MAY 29, 1897.

TO THE HONORABLE SENATE AND HOUSE OF REPRESENTATIVES:

I have the honor to transmit, herewith, the Annual Statistics of Manufactures for the year 1896, which have been collected and are presented in compliance with Chapter 174, Acts of 1886.

Very respectfully,

HORACE G. WADLIN, Chief.

[111]

TABLE OF CONTENTS.

Letter of Transmittal, .										Page iii
								•	•	xiii
Introduction, Number of returns comp	arec	ì.	1886	3-18	96,	:	:	:	•	xiii
STATISTI										
PRIVATE FIRMS AND CORP	ORA'	TIO	NS:	PA	RTN	ERS	AND	STO	CK-	
HOLDERS: BY IND										3-12
For the year 1895, .			•							4-7
For the year 1896, .									•	8-11
Capital Invested: by Ini	DUST	RIE	cs,							13–16
Capital invested: by ind							•			14, 15
STOCK USED: BY INDUSTRIE	ES,						•			17-20
Stock used: by industrie	8.	189	5, 1	396,	•	•	•	•	•	18, 19
GOODS MADE: BY INDUSTR	IES,									21-24
Goods made: by industr	ies.	18	395,	1896	,	•	•	•	•	22, 23
PERSONS EMPLOYED: BY IN	DUS	TRI	ES,							25-64
Smallest, greatest, and av	vera	ge 1	num	ber	of pe	ersor	ıs em	ploye	ed:	
by industries, .		٠,			•			•		27-34
Aggregates. 1895,										27,28
Aggregates. 1896,										29,30
Averages. 1895,										31, 32
										33, 34
Range of employment	and	un	emp	loyi	nent	: b	y ind	ustri	esì.	
1895, 1896,			_			•				35, 36
Aggregates: by months.	18	395,	189	6,	•	•	•	•	•	37–63
WAGES PAID: BY INDUSTRI	ES,			,						65-98
Wages paid: by industri	ies.	18	95, 1	896	,				•	67,68
Average yearly earnings	: by	7 in	dust	ries	• 18	395,	1896,			69,70
Classified weekly wages										71-97
PROPORTION OF BUSINESS D	ONE	: 1	sy I	NDU	STRI	ES,				99-104
Proportion of business de	one :	by	ind	ustr	ies.	189	5, 18	96,		100, 101
Days in operation: by in	dust	rie	s. 1	895	, 189	6,	•	•	•	

SELECTED	IND	JSTR	Y P	RESI	ENTA	ATIO	NS.		D
Notes explanatory of tables	in es	ch in	dusti	rv nre	sents	ation			Page 106, 107
				J Pr	,5011 U	au on	•	•	108-110
Carpetings,	•	Ċ	•	•	•	·	•	•	110-112
Carriages and Wagons	1		·	•	:		÷	•	113-115
Clothing, Cotton Goods, Food Preparations, Furniture, Hosiery and Knit Good Leather,	, .	•	•	:	•	•	·	:	
Cotton Goods	•	•	•	•	•	:	:	•	118-120
Food Preparations	•	•	•	•	:				
Furniture	•	•	•	•		•	•	•	123-125
Hosiowy and Knit Cood	٠.	•	•	•	•	•		•	
Toothor	.5, .	•	•	•	•	•	•	•	
Machines and Machine		•	•	•	•		•	•	130-132
Machines and Machine Metals and Metallic Go	ry,	•	•	•	•		•	•	133-135
Metals and Metallic Go Musical Instruments as	oous,	•		•	•	•	•	•	105-100
Musical Instruments at	aa wa	iteria.	ıs,	•	•	•	•	•	135-137
Paper and Paper Good Woollen Goods, Worsted Goods, All Industries,	s, .	•	•	•	•	•	•	•	138-140
Woollen Goods,	•	•	•	•	•	•	•	٠	140-142
Worsted Goods, .	•	•	•	•	•	•	•	•	143-145
All Industries,	•	•	•	•	•	•	•	•	145-147
		NAL	vere	,					
T									4.54
Basis of comparisons, .		•			•	•	•	•	151
Basis of comparisons, . The meaning of the term "	All I	ndust	ries,'	٠.	•	•	•	٠	151
							~		
PRIVATE FIRMS AND COR									151 155
HOLDERS: BY IN	DUST	RIES,	•		•				
Comparison. Private	nrms	and c	orpo	ration	ıs,	•	•		
Comparison. Duplica									
Comparison. Partners							•	•	
Comparison. Stockho								•	154
Comparison. Averag									
firm and average	num	ber o	fsto	ckhol	ders t	to a c	orpoi	a-	
	•		•	•		•		•	154
Summary of private fi									
holders. 1896,	•	•	•	•	•	•	•	•	154, 155
CAPITAL INVESTED DV I	NDITE	rpire							155_157
CAPITAL INVESTED: BY I Industries which show Industries which show	an in	orose	o in .	1806	•	•	•	•	155
Industries which show	an m	.CI Cas	in 1	2020,	•	•	•	•	155 156
Comparison for nine l	a ueu	a ind	. 111 1	090, .a. T	•		•	٠,	100, 100
									156, 157
and percentages.									
Caution against unwar	rante	ı use	or ng	ures	reiau	ve to	capit	al,	157
STOCK USED: BY INDUST	RIES.								158
The meaning of the te	rm "	Stock	Used	1."					158
Comparison for nine le						se. d	ecrea	se.	
and percentages.									158

viii W. li STATISTICS OF MANUFACTURES. ' [Pub. Doc.

Summary — C	Con.											
Comparis		ncrea	8A. (decre	ase.	orno	chan	re in	canit	al. pr	-bo	Page
	wage											177-181
General s												
Productiv												101-100
	stry											
niu u	d to o	thor i	ovn	onao Paru	лц (1	808 4 a B c c	, ап	ı per	Сециа	Rep	ue-	182-184
vote Explanati	a to o	town	ovh	is indi	, 1	.000,	Inat 11	ond.	"	.a.	d	102-104
Explanau	or ext	. tern	en.	A 22	นธนา	y proc	iuci	аци		опт я	s nu	
Rank of n	exp	- т:	iun	iu,"				•]		182, 183
	ine ie: luct p											104 105
												184, 185
Rank of 1											uct	105
	emplo					•	•	. •	•	•	:	185
Rank of 1												
indu	stry p	rodu	ct p	aid i	n wa	iges.	1895	, 189	6, .	٠.	•	185, 186
Comparis				adin	g inc	lustri	es. 1	1895,	1896,	•	•	186-190
Boots		•		•	•	•	•	•	•	•		186
Carpet		•	•			•	•					186, 187
Cotton	Good	ls,			•		•	•	•			187
Leathe	r,										:	187, 188
Machin	aes ar	ıd Ma	chi	nery	, .							188
Machin Metals	and l	Metal	llic	Good	ls,		•					188, 189
Paper	and P	aper	Go	ods,								189
Metals Paper Woolle	en Go	ods,							•			189, 190
Worste	ed Go	ods,										190
Condense	d gen	eral s	stat	emen	t re	gardi	ng th	e ye	ars 1	895 a	ınd	
1896						٠.	٠.	·				191-193
Capita	l inve	sted.										191
Stock 1	ısed.							•				191
Goode	mada								•			192
Person	s emr	loved	i.									192
Person Wages Propor	naid.		-,			•		•	•		•	192, 193
Propor	tion o	f bus	sine	ss do	ne.	·		•	·		•	400
110po1	 011 0	- 24		u	шо,	•	•	•	•	•	•	100
	13	NDUS	TR	IAL	СН	RON	OLO	3Y, 1	l8 96 .			
				10	age	Bar	re.	•				199
Abington, .					197	1		•	•	• •	•	199
Adams, .	•	•	•		197		hert		Ċ	·	•	199
Agawam, .	•	•	•		197		ingh	am	•	•	•	199
Amesbury,	•		•	197, 1			ERLY	·		•	•	199
Amherst, .	•	•	•		198		erica	, .	•	•	•	100
Andover, .	•	•	•		198 198			, .	•	•	•	
Ashburnham,	•	•	•		198	Diam	ekstor TON,	це,	•	•	•	199, 200
Ashburmani,	•	•	•			DUS	TUN,				•	200-202
Ashland, . Athol, .	•	•	•		198		City	rrop	er,	•		•
Athol,	•	•	•		198		gra	nton,	•	•	•	201
Attleborough,	•	•	•		198				wn,		•	201
Auburn, .		•	•		199				er,	•	•	201
Ayon, .	•	•	•	1	.99	l	East	Bost	on,	•	•	210

INDUSTRIAL CHRONOLOGY, 1896 — Continued BOSTON - Con. Page Page Jamaica Plain, . 201 FITCHBURG. 211 Mattapan, . . 201 Framingham. . 211 Neponset. . 201 Franklin. 212 Roslindale, 201 Roxbury, . 201 Gardner, 212 South Boston. 201, 202 Georgetown. 212 West Roxbury, . 202 GLOUCESTER, . 212 Bovlston, . 202 Grafton. . . 212 Bradford, . 202 Great Barrington, . 212 Braintree. . 202 Greenfield. . 213 Bridgewater, . 202 Groveland. 213 BROCKTON, 202-204 Brookfield, 204 Hadley, . 213 Brookline. . 204 Hampden.. 213 Hardwick.. 213 CAMBRIDGE, Hatfield, . 205 213 HAVERHILL. . Canton. . 205 213, 214 Hinsdale, . Charlton. . 205 214 Chelmsford. Holbrook. . 205 214 Holden, . CHELSEA. . 205 215 Cheshire. . 205 Holliston. 215 Chester, . HOLYOKE,. 205 215, 216 Chesterfield, . Hopedale, . 205 216 CHICOPEE. . 205, 206 Hopkinton, 216 Clinton. . Hudson, . 206 216 Conway. . Huntington. 206 216 Hyde Park, Cummington, . 206 216 Dalton. 206, 207 Ipswich, . 216 Dana. 207 Danvers, . 207 LAWRENCE. 216, 217 Dedham, . 207 Lee, . . 217 Deerfield. . 207 Leicester, . 218 Dighton, . 207 Lenox. . 218 Douglas. . 207 Leominster, 218 Dracut. 207 LOWELL, . 218, 219 Dudley, . 207 Ludlow, . 219 LYNN, 219-221 East Bridgewater. . 207 Easthampton, . 207, 208 MALDEN. . 221 Easton, . 208 Marblehead. 221 Enfield, 208 MARLBOROUGH. 221 Essex, 208 Maynard. . . 221 EVERETT, . 208 MEDFORD, 221, 222 FALL RIVER, . 208-211 | Medway, . 222

STATISTICS OF MANUFACTURES. [Pub. Doc.

WWW.libtool.com.cn
INDUSTRIAL CHRONOLOGY. 1896 — Continued.

	IND	UST	RIAL	CHRO	NOL	OGY.	1896 —	Cont	inued	•	
				Pa	age						Page
Melrose,				. 2:	22		е, .			•	228
Merrimac	, .			. 2:	22	Rockla	and, .			•	228
Methuen,		•	•	. 2:	22	Rockp	ort, .				229
Methuen, Middlebor	ough	,		. 2:	22	Rowle	ort, . y,				229
Middlefiel	d,	•		. 2:	22	Russel	ì, ·				229
Middleton	,			. 2:	22	Rutlan	ıd, · .				229
Milford,		•		222, 2	23						
Millbury,				2:	23	SALEM					229
Millis,				2:	23		s, .			•	229
Milton,				. 2:	23	Shelbr	rne	:	:	•	229
Monroe,				. 2:	23	Shirle	rne, y,	:	•	•	229
Monson.					23	Somer	y, .		:	•	229
Montague				. 2:	23	SOME	set, . RVILLE,	• .	•	٠,	29, 230
6	•						orough,		•		230
Natick,				9	23		oridge,		•	•	230
Nauck,	•	•	•	223, 2			Hadley,		:	•	230
Needham, NEW BED	ronn	•	•		24		•		•	•	
New DED	FURD	,	•				er, . GFIELD,		•	٠ ۵	230
Newbury,		•	•		24				•	. 2	30, 231
NEWBURY New Marl	1 0101	,		224, 2		Stocko	ridge,	•	•	•	231
			•		25		ıg,	•	•	•	231
NEWTON,	•	•	•		25	Stoneh		•	•	•	231
Norfolk,	•	•			25	Stough	iton,	•	•	•	231
NORTH A					25	Stow,	idge,	•	•	•	231
NORTHAM				-	25				•	•	231
North And					26	Sutton	, . pscott,	•	•	•	231
North Att					26	Swam	pscott,	•	•	•	231
Northbord Northbrid	ugh,	•			26						
		•			26	TAUNT				. 2	3 1, 232
Northfield	•	•			26	Templ	eton,				232
Norwood,	•	•		22	26	Topsfie					232
						Towns	end,	•			232
Orange,				22	26						
Oxford,		•		22	27	Upton,					232
							lge, .				23 2
Palmer,		•		22							
Peabody,				22	27	Wakefi	h[ai				232
Pepperell,			:	22		Wales,					232
PITTSFIEL	D.			227, 22	- 1	Walpo	10	•	•	•	232
Plymouth,					- 1	WATER	IAM,		•		32 , 2 33
Princeton,						Ware,		•	•	. z	233
Provinceto						Ware,	•	•	•	•	233
		-	•	22		Warren	ц, .	•	•	•	
Ountor				0.0		Watert	own, nd, .	•	•		233
QUINCY,	•	•	• •	22	28	wayiai	uu, .	•	•	. 2	33, 234
Dandal-1				0.0	.	Webste	er, .	•	•	•	234
Randolph,					28	westbo	orough,	•	•	•	234
Reading,		•		22	28	west E	Boylston,	•	•	•	234

No. 36.7	N	o.	36	ð.	7
----------	---	----	----	----	---

TABLE OF CONTENTS.

хi

www.libtool.com.cn INDUSTRIAL CHRONOLOGY. 1896 — Concluded.

		Page			Page
West Bridgewater,		234	Williamsburg,		235
West Brookfield,		234	Williamstown,		235
Westfield,		235	Winchendon,		236
Westford,		235	Winchester,		236
Westminster,		235	WOBURN, .		236
West Newbury,		235	WORCESTER,		236-238
Westport,		235	Worthington,		238
West Springfield,		235	Wrentham,		238
Weymouth, .		235	•		
Whitman		235	THE STATE.		238-240

THE

ANNUAL STATISTICS OF MANUFACTURES.

1896.

INTRODUCTION.

The present is the eleventh report on the Annual Statistics of Manufactures, issued in accordance with the provisions of Chapter 174 of the Acts of 1886.

The following table indicates the number of returns compared in these annual reports, in each year, beginning with 1886:

	 Y	EARS		Number of Establishments Considered		YE	ARS.	_		Number of Establishments Considered
1886,				1,027	1892,					4,473
1887,				1,027	1893,					4,397
1888,				1,140	1894,					4,093
1889,				1,364	1895,					3,629
1890,				3,041	1896,					4,609
1891,				8,745						1

The value of these reports is, of course, proportionate to the number of returns upon which they are based, and the increase in the returns since 1886 is very gratifying. The thanks of this Bureau are extended to those manufacturers who have so willingly complied with the requests of this office.

Mr. Frank H. Drown, Second Clerk of the Bureau, has had direct charge, as heretofore, of the clerks and special agents engaged in the preparation of this volume. I wish to record here my thanks to him for the painstaking and efficient service which he has rendered; and also to acknowledge the general co-operation and assistance of Mr. Charles F. Pidgin, Chief Clerk.

STATISTICS OF MANUFACTURES. 1896.

PRIVATE FIRMS AND CORPORATIONS; PARTNERS AND STOCKHOLDERS:

BY INDUSTRIES.

PRIVATE FIRMS AND CORPORATIONS; PARTNERS AND STOCKHOLDERS: BY INDUSTRIES.

1895.

[There are duplications in the columns devoted to "Number of Private Firms," "Partners," "Number of Corporations," and "Stockholders." These duplications are indicated by an asterisk (*). They are caused by the fact that the same firm or corporation is often engaged in manufacturing in two or more establishments located in different towns and sometimes in different industries. The plan adopted has been to consider each establishment (whether managed in connection with another or not) as one, and to credit the whole number of firms, partners, corporations, and stockholders to each industry, but to count them once only in making up the total for "All Industries."]

		Number of Estab-	Number	PART	NERS
	Industries.	lishments Considered	Private Firms	Males	Females
1	Agricultural implements,	8	8	5	_
2	Arms and ammunition,	12	8	10	1
8	Artisans' tools,	69	54	76	2
4	Awnings, sails, tents, etc.,	32	82	42	1
5	Bicycles, tricycles, etc.,	10	1	2	-
6	Boots and shoes,	605	549	872	9
7	Boxes (paper and wooden),	158	*143	*199	5
8	Brick, tiles, and sewer pipe,	56	46	75	4
9	Brooms, brushes, and mops,	19	16	23	-
10	Burial cases, caskets, coffins, etc.,	7	4	8	-
11	Buttons and dress trimmings,	15	8	11	1
12	Carpetings,	12	8	4	-
13	Carriages and wagons,	143	*182	*186	1
14	Cement, kaolin, lime, and plaster,	10	7	· 14	-
15	Chemical preparations (compounded), .	12	. 8	11	1
16	Clocks, watches, and jewelry,	99	92	170	10
17	Clothing,	130	110	199	1
18	Cooking, lighting, and heating apparatus, .	85	22	80	. 2
19	Cordage and twine,	29	17	23	1
20	Corks, bungs, and taps,	8	3	4	-
21	Cotton goods,	169	34	51	7
22	Cotton, woollen, and other textiles,	2	-	-	-
23	Crayons, pencils, crucibles, etc.,	4	· 8	4	-
24	Drugs and medicines,	27	14	19	1
25	Dyestuffs,	8	4	5	1
26	Earthen, plaster, and stone ware,	7	6	8	-
27	Electrical apparatus and appliances,	23	12	18	-
28	Electroplating,	12	12	16	-
29	Emery and sand paper and cloth, etc.,	10	1	1	-
80	Fancy articles, etc.,	11	9	12	-
=		<u> </u>			

STATISTICS OF MANUFACTURES.

1896.

6 STATISTICS OF MANUFACTURES. [Pub. Doc. www.libtool.com.cn

PRIVATE FIRMS, PARTNERS, ETC.: BY INDUSTRIES — 1895 — Concluded.

=		Wambar of	Number	PART	NERS
	Industries.	Number of Estab- lishments	of Private		1
_		Considered	Firms	Males	Females
1	Fertilizers,	8	8 -	5	-
2	Fine arts and taxidermy,	8	2	8	-
8	Fireworks and matches,	4	2	4	
4	Flax, hemp, jute, and linen goods,	10	5	11	-
5	Food preparations,	819	+278	*890	6
6	Furniture,	119	108	166	9
7	Glass,	14	11	19	2
8	Glue, isinglass, and starch,	23	15	25	1
9	Hair work (animal and human),	7	7	5	1
10	Hose: rubber, linen, etc.,	4	8	3	_
11	Hosiery and knit goods,	42	25	41	2
12	Ink, mucilage, and paste,	7	7	11	_
18	Ivory, bone, shell, and horn goods, etc., .	18	17	28	1
14	Leather,	148	*124	*215	1
15	Liquors and beverages (not spirituous), .	28	26	85	-
16	Liquors: malt, distilled, and fermented, .	57	36	57	5
17	Lumber,	82	*28	40	8
18	Machines and machinery,	871	+246	*853	11
19	Metals and metallic goods,	882	+280	*406	7
20	Mixed textiles,	12	4	4	
21	Models, lasts, and patterns,	49	46	65	1
22	Musical instruments and materials	65	46	67	
23	Oils and illuminating fluids,	9	7	9	_
24	Paints, colors, and crude chemicals,	28	16	31	_
25	Paper and paper goods,	123	44	83	•
26	Perfumes, toilet articles, etc.,	4	2	2	_
27	Photographs and photographic materials, .	24	20	21	1
28	Polishes and dressing,	83	27	44	1
29	Printing, publishing, and bookbinding,	47	82	53	2
80	Print works, dye works, and bleacheries, .	47	29	39	8
81	Railroad construction and equipment,	16	8	5	
82	Rubber and elastic goods,	41	+20	*81	1
83	Saddlery and harness,	41	88	44	_
84	Scientific instruments and appliances,	20	16	22	_
85	Shipbuilding,	51	47	64	-
36	Silk and silk goods,	9	4	5	1
87	Sporting and athletic goods,		6	7	_
88	Stone,	199	*180	*289	+9
89	Straw and palm leaf goods,	21	17	85	_
40	Tallow, candles, soap, and grease,	60	55	77	-
41	Tobacco, snuff, and cigars,	48	41	57.	1
42	Toys and games (children's),	111	9	14	2
48	Trunks and valises,	7	7	10	_
44	Whips, lashes, and stocks,	15	11	19	2
45	Wooden goods,	158	186	188	3
46	Woollen goods,	122	+87	+182	7
47	Worsted goods,	27	14	25	1
48	ALL INDUSTRIES,	4,609	3,529	5,342	180
		-,	-,		

PRIVATE FIRMS AND CORPORATIONS; PARTNERS AND STOCKHOLDERS:

BY INDUSTRIES.

PRIVATE FIRMS AND CORPORATIONS; PARTNERS AND STOCKHOLDERS: BY INDUSTRIES.

1896.

[There are duplications in the columns devoted to "Number of Private Firms," "Partners," "Number of Corporations," and "Stockholders." These duplications are indicated by an asterisk (*). They are caused by the fact that the same firm or corporation is often engaged in manufacturing in two or more establishments located in different towns and sometimes in different industries. The plan adopted has been to consider each establishment (whether managed in connection with another or not) as one, and to credit the whole number of firms, partners, corporations, and stockholders to each industry, but to count them once only in making up the total for "All Industries."]

		Number of Estab-	Number	PART	NERS
	. Industries.	lishments Considered	Private Firms	Males	Females
1	Agricultural implements,	8	8	5	_
2	Arms and ammunition,	12	8	11	1
8	Artisans' tools,	69	58	75	2
4	Awnings, sails, tents, etc.,	82	82	42	1
5	Bicycles, tricycles, etc.,	10	1	1	-
6	Boots and shoes,	605	548	863	18
7	Boxes (paper and wooden),	158	*142	*198	8
8	Brick, tiles, and sewer pipe,	56	46	74	4
9	Brooms, brushes, and mops,	19	16	24	_
10	Burial cases, caskets, coffins, etc.,	7	4	8	-
11	Buttons and dress trimmings,	15	8	12	4
12	Carpetings,	12	8	4	-
13	Carriages and wagons,	148	*132	*185	1
14	Cement, kaolin, lime, and plaster,	10	7	13	-
15	Chemical preparations (compounded), .	12	8	11	2
16	Clocks, watches, and jewelry,	99	92	170	9
17	Clothing,	130	109	191	2
18	Cooking, lighting, and heating apparatus, .	35	22	29	2
19	Cordage and twine,	29	17	22	2
20	Corks, bungs, and taps,	8	8	7	-
21	Cotton goods,	169	34	58	7
22	Cotton, woollen, and other textiles,	2.	-	_	-
23	Crayons, pencils, crucibles, etc.,	4	8	٠ 4	-
24	Drugs and medicines,	27	15	20	-
25	Dyestuffs,	8	4	6	-
26	Earthen, plaster, and stone ware,	7	6	8	-
27	Electrical apparatus and appliances,	23	12	19	-
28	Electroplating,	12	12	16	-
29	Emery and sand paper and cloth, etc.,	10	1	١ 1	-
30	Fancy articles, etc.,	11	9	11	-

PRIVATE FIRMS AND CORPORATIONS; PARTNERS AND STOCKHOLDERS: BY INDUSTRIES.

1896.

[There are duplications in the columns devoted to "Number of Private Firms," "Partners," "Number of Corporations," and "Stockholders." These duplications are indicated by an asterisk (*). They are caused by the fact that the same firm or corporation is often engaged in manufacturing in two or more establishments located in different towns and sometimes in different industries. The plan adopted has been to consider each establishment (whether managed in connection with another or not) as one, and to credit the whole number of firms, partners, corporations, and stockholders to each industry, but to count them once only in making up the total for "All Industries."]

	PARTNER	3	Number		8тоск	HOLDERS		AGGREGATES:	Γ
Special	Estates	Total	of Corpora- tions	Males	Females	Banks, Trustees, etc.	Total	Partners and Stockholders	
-	_	5	5	48	23	13	84	89	1
-	1	13	4	85	85	16	136	149	2
-	2	79	16	430	261	78	769	848	8
-	-	. 43	-	_	_	• -	-	43	4
-	-	1	9	222	27	17	266	267	5
14	2	892	*57	+734	168	24	*926	*1,818	6
2	2	+205	*16	*107	27	1	*135	*340	7
-	2	80	10	250	94	29	373	453	8
-	-	24	3	16	20	6	42	66	9
-	-	8	8	60	10	10	80	88	10
-	-	16	*7	*61	15	4	*80	*96	11
-	-	4	9	487	388	180	1,055	. 1,059	12
1	4	*191	11	103	58	5	166	*357	13
-	-	13	3	18	1	. 2	21	34	14
-	-	13	4	55	16	· 6	77	· 90	15
4	-	183	7	125	27	10	162	345	16
2	1	196	21	293	108	11	407	603	17
2	1	34	13	147	58	15	215	249	18
2	-	26	*12	*1 287	207	9	*1508	*1 529	19
-	-	7	-	-	-	i · -	-	7	20
-	2	62	*135	*10,908	*8,446	*2,927	+22,281	*22,34 3	21
-	-	-	*2	*206	*184	*126	*516	*516	22
-	-	4	1	10	2	· -	12	16	23
-	-	20	12	94	38	5	137	157	24
-	-	6	4	45	18	6	64	70	25
-	-	8	1	12	8	i -	15	23	26
-	-	19	11	814	59	12	385	404	27
-	-	16	-	-	-	-	-	· 16	28
-		1	9	85	17	6	108	109	29
-	-	11	2	40	4	-	44	55	80
	'	·	·	<u> </u>	<u>' </u>	'	<u> </u>	<u> </u>	

¹ Includes one syndicate.

10 STATISTICS OF MANUFACTURES. [Pub. Doc. www.libtool.com.cn

PRIVATE FIRMS, PARTNERS, ETC.: BY INDUSTRIES — 1896 — Concluded.

-	- 0010	luded.			•
		Number of Estab-	Number	PAR	INERS
	Industries.	lishments Considered	Private Firms	Males	Females
1	Fertilizers,	8	8	5	_
2	Fine arts and taxidermy,	8	2	3	-
8	Fireworks and matches,	4	2	4	-
4	Flax, hemp, jute, and linen goods,	10	4	9	_
5	Food preparations,	319	+273	*382	6
6	Furniture,	119	106	162	. 9
7	Glass,	14	11	19	1
8	Glue, isinglass, and starch.	23	15	24	1
9	TT. 1	7	7	8	8
10	,	4	3	8	
11	Hose: rubber, linen, etc.,	- 1		-	-
	Hosiery and knit goods,	42	25	42	4
12	Ink, mucilage, and paste,	7	6	8	-
18	Ivory, bone, shell, and horn goods, etc.,	18	17	28	1
14	Leather,	143	*123	*217	1
15	Liquors and beverages (not spirituous), .	28	26	83	1
16	Liquors: malt, distilled, and fermented, .	57	34	57	5
17	Lumber,	32	*28	38	8
18	Machines and machinery,	371	*241	*838	12
19	Metals and metallic goods,	382	+275	*386	10
20	Mixed textiles,	12	4	4	_
21	Models, lasts, and patterns,	49	45	65	1
22	Musical instruments and materials,	65	45	64	1
23	Oils and illuminating fluids,	9	7	10	_
24	Paints, colors, and crude chemicals,	28	16	80	_
25	Paper and paper goods	123	40	73	
26	Perfumes, toilet articles, etc.,	4	2	2	
27	Photographs and photographic materials,	24	1	21	2
28			20		
29	Polishes and dressing,	83	27	43	1
	Printing, publishing, and bookbinding,	47	32	53	2
30	Print works, dye works, and bleacheries, .	47	29	87	8
81	Railroad construction and equipment,	16	8	5	-
82	Rubber and elastic goods,	41	*20	*80	2
33	Saddlery and harness,	41	38	44	-
34	Scientific instruments and appliances,	20	16	. 22	-
3 5	Shipbuilding,	51	47	62	-
8 6	Silk and silk goods,	9	4	5	1
37	Sporting and athletic goods,	9	6	7	-
88	Stone,	199	*179	*277	+8
39	Straw and palm leaf goods,	21	18	36	-
40	Tallow, candles, soap, and grease,	60	55	78	_
41	Tobacco, snuff, and cigars,	48	41	56	. 2
42	Toys and games (children's),	11	9	18	2
43	Trunks and valises,	7	7	10	_
44	White lashes and stools	15	11	19	2
45	Weeden mede	153	134	187	
46	Washin made	122	*86		2
47	Wounded monda			*133	7
	,	27	13	24	1
48	All Industries,	4,609	3,493	5,233	145

PRIVATE FIRMS, PARTNERS, ETC.: BY INDUSTRIES — 1896 — Concluded.

PARTNERS Number					STOCE	AGGREGATES:			
pecial	Estates	Total	of Corpora- tions	Males	Females	Banks, Trustees, etc.	Total	Partners and Stockholders	
_	_	5	_	_	_	_		5	1
-	-	8	1	6	1	-	7	10	2
_	-	4	2	502	253	38	798	797	8
-	1	10	6	59	54	15	128	138	4
-	*7	+395	*46	+1577	*104	24	+1705	*11,100	5
2	2	175	13	207	80	32	319	494	6
-	-	20	8	125	11	1	187	157	7
-	-	25	8	196	81	12	239	264	8
-	1	7	-	-	-	-	-	7	9
-	-	3	1	88	47	8	138	141	10
-	-	46	+17	*646	*408	*251	*1,805	*1,851	11
-	-	8	1	4	-	-	4	12	12
-	-	29	1	10	-	-	10	39	18
*8	-	+221	+20	*201	+71	•17	+289	*510	14
-	-	34	2	36	7	-	43	77	15
-	-	62	23	³ 662	57	1	3 720	2 782	16
-	*2	*48	4	71	88	10	114	*157	17
-	. 9	*359	+130	+ 2,748	*1,190	+328	* * 4,256	**4,615	18
2	7	*40 5	107	11,358	597	175	¹ 2,125	*12,580	19
-	-	4	8	146	8	_	1 54	1 58	20
-	-	66	*4	+27	*24	-	+51	*117	21
-	2	67	20	112	23	8	148	210	22
-	_	10	2	9	8	8	15	25	23
-	-	80	7	67	13	1	81	111	24
-	1	74	+83	*1,092	*476	*124	*1,692	+1,766	25
-	_ '	2	2	7	2	-	9	11	26
-	-	23	4	21	7	6	84	57	27
-	1	45	6	72	11	8	86	131	28
-	1	56	15	114	25	8	142	198	29
-	1	41	+18	+667	+585	+486	+1,688	+1,729	30
-	-	5	*18	**231	60	10	** 301	**806	81
-	_	+32	+21	*478	*335	86	+894	*926	82
-	1	45	8	19	7	-	26	71	33
-	1	28	4	88	9	4	101	124	34
-	1	68	4	81	. 8	7	96	159	85
-	-	6	5	61	11	1	78	79	36
-	-	7	8	18	10	1	29	36	37
1	8	+289	20	870	148	33	551	*840	38
1	-	87	8	11	6	2	19	56	39
-	-	78	5	44	24	1	69	142	40
1	-	59	7	42	5	2	49	108	41
8	-	18	2	16	- '	-	16	84	42
-	-	10	-	-	-	-	-	10	48
-	-	21	4	163	68	8	239	260	44
-	1	190	19	171	38	16	225	415	44
-	5	*145	*36	*566	*467	*188	*1,216	*1,361	46
8		28	. *14	*809	*130	+62	*501	+529	47
42	62	5,482	1,070	4 26,528	14,750	4,865	4 46,148	4 51,625	48

¹ Includes one syndicate.

³ Includes four railroads.

² Includes three syndicates.

⁴ Includes 10 syndicates and four railroads.

CAPITAL INVESTED:

BY INDUSTRIES.

CAPITAL INVESTED: BY INDUSTRIES.

1895, 1896.

[In this presentation, the figures given under "Amount of Capital Invested" represent the returns made by the same establishments, in each industry, for the years 1895 and 1896, the whole number of establishments considered in "All Industries" being 4,609. Comparison is made, as regards the amount of capital invested, between these two years. The relative increase or decrease in 1896 as compared with 1895 is given with its equivalent percentage.

Industries.	Number of Estab- lishments	AMOU CAPITAL	NT OF INVESTED	Increase (+), or Decrease (-), in 1896	
AND STREET.	Con- sidered	1895	1896	Amounts	Percent-
Agricultural implements,	8	\$1,077,477	\$959,014	-\$118,463	-10.96
Arms and ammunition,	12	1,681,189	1,632,256	-48,933	-2.9
Artisans' tools,	69	2,722,827	2,712,280	-10,547	-0.39
Awnings, sails, tents, etc.,	32	. 98,455	102,553	+4,098	+4.10
Bicycles, tricycles, etc.,	10	2,193,671	2,269,896	+76,225	+3.4
Boots and shoes,	605	23,172,349	19,990,145	-3,182,204	-13.73
Boxes (paper and wooden),	158	2,909,086	2,747,582	161,504	-5.5
Brick, tiles, and sewer pipe,	56	1,971,029	1,987,023	+15,994	+0.83
Brooms, brushes, and mops,	19	622,934	591,306	-31,628	-5.00
Burial cases, caskets, coffins, etc., .	7	135,496	143,152	+7,656	+5.68
Buttons and dress trimmings, .	15	738,106	732,035	-6,071	-0.89
Carpetings,	12	6,008,497	6,020,485	+11,988	+0.20
Carriages and wagons,	148	2,416,494	2,362,896	53,598	-2.2
Cement, kaolin, lime, and plaster, .	10	112,139	97,365	-14,774	-18.17
Chemical preparations (compound-		,	.		
ed),	12	1,291,405	1,492,497	+201,092	+15.57
Clocks, watches, and jewelry, .	99	3,030,807	2,924,403	106,404	-3.51
Clothing	130	4,346,666	4,054,647	-292,019	-6.72
Cooking, lighting, and heating ap-				Í	
paratus	35	1,305,862	1,239,829	66,033	-5.00
Cordage and twine.	29	3,942,825	3,155,049	—787,776	-19.98
Corks, bungs, and taps,	8	27,847	40,025	+12,178	+43.78
Cotton goods,	169	116,141,614	112,902,817	-3,238,797	-2.79
Cotton, woollen, and other textiles,	2	3,532,561	3,290,683	-241,878	-6.85
Crayons, pencils, crucibles, etc.,	4	44,233	41,496	—2,7 37	-6.19
Drugs and medicines	27	898,110	910,965	+12,855	+1.48
Dyestuffs,	8	544,084	493,037	-51,047	-9.38
Earthen, plaster, and stone ware, .	7	412,967	383,748	-29,219	-7.08
Electrical apparatus and appliances,	23	3,303,450	2,947,150	—356, 300	-10.79
Electroplating,	12	57,329	54,608	-2,726	-4.76
Emery and sand paper and cloth, etc.,	10	620,380	627,664	+7,284	+1.17
Fancy articles, etc.,	11	187,003	131,316	-5,687	-4.15
Fertilizers,	8	79,519	102,144	+22,625	+28.45
Fine arts and taxidermy,	8	28,775	28,500	—27 5	-0.96
Fireworks and matches,	4	118,557	92,604	-25,953	-21.89
Flax, hemp, jute, and linen goods,.	10	2,497,988	2,550,520	+52,532	+2.10
Food preparations,	319	13,977,217	13,687,962	-289,255	-2.07
Furniture,	119	3,611,891	3,470,925	—140,96 6	-8.90
Glass.	14	121,126	113,337	—7,789	-6.43

www.libtool.com.cn CAPITAL INVESTED: BY INDUSTRIES—1895, 1896—Concluded.

Industries,	Number of Estab- lishments	· Amou Capital	NT OF INVESTED	Increase (+), or Decrease (-), in 1806	
INDUSTRIES	Con- sidered	1896	1806	Amounts	Percent- ages
Glue, isinglass, and starch,	23	\$1,059,491	\$1,080,614	+821,123	+1.99
Hair work (animal and human),	7	124,598	120,000	-4,598	-3.69
Hose: rubber, linen, etc.,	4	570,566	- 1		+56.17
Hosiery and knit goods,	42	4,477,489	4,308,270	-269,169	-6.01
Ink, mucilage, and paste,	7	89,818	81,702	-6,116	-9.04
Ivory, bone, shell, and horn goods,	· '		- 1	·	
etc.,	18	342,642	331,290	-11,352	-3.31
Leather,	143	8,479,094	7,329,970	—1,149,124	-13.55
Liquors and beverages (not spirit-			l i		
uous),	28	374,546	369,176	—5,87 0	-1.43
Liquors: malt, distilled, and fer-			1	•	
mented,	57	10,297,548	10,265,815	—31,733	-0.31
Lumber,	32	1,693,631	1,483,612	-210,019	-12.40
Machines and machinery,	371	23,167,426	28,733,634	+566,208	+2.44
Metals and metallic goods,	882	19,177,940	17,633,004	-1,544,936	_8.06
Mixed textiles,	12	884,182	886,312	+2,130	+0.24
Models, lasts, and patterns,	49	521,964	503,462	18,502	_3.54
Musical instruments and materials,	65	3,595,336	8,192,496	-402,840	-11.20
Oils and illuminating fluids,	9	375,406	363,980	-11,426	-3.04
Paints, colors, and crude chemicals,	23	653,300	624,595	-28,705	-4.39
Paper and paper goods,	123	24,682,633	23,670,894	-1,011,739	-4.10
Perfumes, toilet articles, etc., .	4	61,834	48,288	-13,546	-21.91
Photographs and photographic ma-			· 1	·	
terials.	24	401,220	897,367	-3,853	0.96
Polishes and dressing,	33	882,187	932,080	+49,893	+5.66
Printing, publishing, and bookbind-				, ,	,
ing,	47	2,918,537	2,904,792	-18,745	-0.47
Print works, dye works, and bleach-					
eries,	47	18,256,027	13,270,967	+14,940	+0.11
Railroad construction and equip-		1			•
ment,	16	2,663,787	2,671,390	+7,603	+0.29
Rubber and elastic goods,	41	10,850,493	9,525,774	-1,324,719	-12.21
Saddlery and harness,	41	301,587	272,852	-28,735	-9.53
Scientific instruments and appli-					
ances,	20	548,140	555,801	+7,661	+1.40
Shipbuilding,	51	522,171	493,272	-28,899	-5.53
Silk and silk goods,	9	1,715,006	1,684,838	-30,168	-1.76
Sporting and athletic goods,	9	404,762	460,165	+55,403	+13.69
Stone,	199	3,744,084	8,603,720	-140,314	-3.75
Straw and palm leaf goods,	21	1,948,115	1,919,395	-28,720	-1.47
Tallow, candles, soap, and grease,	60	1,668,898	1,617,444	-51,454	-3.08
Tobacco, snuff, and cigars,	48	1,054,548	1,182,356	+127,813	+12.12
Toys and games (children's),	11	326,287	325,575	-712	-0.22
Trunks and valises,	7	53,306	59,481	+6,175	+11.58
Whips, lashes, and stocks,	15	834,251	388,890	+54,639	+16.35
Wooden goods,	158	3,144,490	2,883,935	—26 0,555	-8.29
Woollen goods,	122	21,932,897	19,186,201	-2,746,696	-12.52
	27	15,700,666	15,343,809	954 957	-2.27
Worsted goods,	27	10,100,000	10,020,003	-356,857	-2.20

STOCK USED: BY INDUSTRIES.

STOCK USED: BY INDUSTRIES.

1895, 1896,

[In this presentation, the figures given under "Value of Stock Used" represent the returns made by the same establishments, in each industry, for the years 1895 and 1896, the whole number of establishments considered in "All Industries" being 4,609. Comparison is made, as regards value of stock used, between these two years. The relative increase or decrease in 1896 as compared with 1895 is given with its equivalent percentage.]

Industries.	Number of Estab- lishments	VAL OF STOC	UE K USED	INCREASE (+), OR DECREASE (-), IN 1896	
INDUSTRIES.	Con- sidered	1895	1896	Amounts	Percent ages
Agricultural implements,	8	\$478,037	\$430,237	—\$47,80 0	-10.0
Arms and ammunition,	12	483,686	429,660	54,026	-11.1
Artisans' tools,	69	791,967	833,733	+41,766	+5.2
Awnings, sails, tents, etc.,	32	161,189	161,410	+221	+0.1
Bicycles, tricycles, etc.,	10	1,189,388	1,835,027	+145,639	+12.5
Boots and shoes,	605	55,559,505	53,883,477	-1,676,028	-8.0
Boxes (paper and wooden),	158	2,707,654	2,542,516	-165,138	-6.1
Brick, tiles, and sewer pipe,	.56	428,999	462,877	+33,878	+7.9
Brooms, brushes, and mops,	19	724,178	780,444	+6,266	+0.0
Burial cases, caskets, coffins, etc., .	7	202,248	202,195	-48	-0.
Buttons and dress trimmings	15	406,385	826,148	80,187	—19.
Carpetings	12	4,836,556	8,302,865	-1,033,691	-23.
Carriages and wagons	143	1,813,499	1,664,385	-149,114	-8.
Cement, kaolin, lime, and plaster, .	10	203,485	184,236	19,199	
Chemical preparations (compound-	1 1			,	
ed).	12	685,187	548,017	-137,170	—20.
Clocks, watches, and jewelry,	99	2,321,722	2,016,780	-304,942	
Clothing	180	11,131,226	9,646,549	-1,484,677	
Cooking, lighting, and heating ap-			0,010,010		-
paratus	35	788,242	781,157	57,085	-7.
Cordage and twine	29	8,325,090	8,812,331	+487,241	+14.
Corks, bungs, and taps,	3	31,699	48,311	+16,612	•
Cotton goods	169	46,244,435	50,297,985	+4,053,550	•
Cotton, woollen, and other textiles,	2	1,130,546	1,306,773	+176,227	•
Crayons, pencils, crucibles, etc., .	4	83,394	31,319	2,075	
Drugs and medicines	27	1,283,148	1,356,468	+73,320	
Dyestuffs	8	508,490	345,419	-163,071	•
Earthen, plaster, and stone ware, .	7	74,818	65,025	-9,288	
Electrical apparatus and appliances,	1 1	2,592,548	2,212,721	-379,827	
Electroplating	12	85,744	88,905	+3,161	
Emery and sand paper and cloth, etc.	1	278,062	830,765	+52,708	
Fancy articles, etc.,	11	132,468	181,113	-1,850	
FR	8	155,831	129,469	-25,862	
Fermizers,	3	8,049	8,899	+850	
Fireworks and matches	4	63.150	55,566	—7.584	
Flax, hemp, jute, and linen goods, .	10	2,212,565	2,065,651	—146,914	
Food preparations	819	32,369,971	80,465, 871	-1,904,100	
Th	119		8,172,788	-1,904,100 -675,751	
~ 1		3,848,539			
Glass,	14	114,757	133,532	+18,775	+16.

No. 36.] STOCK USED. www.libtool.com.cn

STOCK USED: BY INDUSTRIES - 1895, 1896 - Concluded.

Industries.	Number of Estab- lishments	VAI OF STOC	LUE EK USED	Increase OR Decrease 1896	(+), s (-), n
INDUSTRIES.	Con- sidered	1895	1896	Amounts	Percent ages
Glue, isinglass, and starch,	23	\$ 581,352	\$685,39 5	+\$104,043	+17.9
Hair work (animal and human), .	7	245,524	214,380	31,144	-12.6
Hose: rubber, linen, etc.,	4	781,701	670,327	-61,374	-8.8
Hosiery and knit goods,	42	3,876,271	2,406,106	970,165	-28.7
ink, mucilage, and paste,	7	169,699	154,499	-15,200	8.9
ivory, bone, shell, and horn goods,		,			
etc.,	18	432,770	392,045	-40,725	-9.4
Leather	143	15,746,203	13,127,769	-2,618,434	-16.0
Liquors and beverages (not spirit-		,,		_,010,201	
uous),	28	281,851	205,939	-75,912	-26.9
Liquors: malt, distilled, and fer-		202,002	200,000	-,0,012	_20.
mented.	57	3,614,404	8,718,570	+104,166	+2.0
Lumber.	32	1,248,415	1,143,802		—8.
Machines and machinery	371	1		-104,618	
• • • • • • • • • • • • • • • • • • • •		9,931,227	10,350,938	+419,711	+4.
Metals and metallic goods,	882	11,021,656	10,626,329	395,327	-3.
Mixed textiles,	12	970,461	720,849	-249,612	-25.
Models, lasts, and patterns,	49	302,120	301,117	-1,003	-0.
Musical instruments and materials,	65	1,611,842	1,288,400	-323,442	-20.
Oils and illuminating fluids,	9	586,910	591,681	+4,771	+0.
Paints, colors, and crude chemicals,	23	773,695	637,117	-136,578	-17.
Paper and paper goods,	123	14,830,407	13,625,290	-1,205,117	-8.
Perfumes, toilet articles, etc.,	4	180,454	167,168	-13,286	-7.
Photographs and photographic ma-					
terials,	24	350,093	302,554	-47,539	-13.
Polishes and dressing,	33	1,017,651	1,005,243	-12,408	-1.
Printing, publishing, and bookbind-					
ing,	47	1,280,476	1,272,659	—7,817	-0.
Print works, dye works, and bleach-	١.	1 1			
eries,	47	15,571,467	14,649,591	-921,876	— 5.
Railroad construction and equip-		' '	, ,		
ment,	16	1,462,920	1,973,419	+510,499	+34.
Rubber and elastic goods,	41	12,309,931	11,577,325	-782,606	-5.
Saddlery and harness,	41	569,402	530,964	38,438	-6.
Scientific instruments and appli-		, , , , , , , , , , , , , , , , , , , ,	,	33,23	
ances.	20	183,698	155,535	-28,163	-15.
Shipbuilding,	51	256,336	224,921	-81,415	—12°.
Silk and silk goods,	9	2,023,968	1,748,243	-280,725	—13.
Sporting and athletic goods,	9	288,612	287,529	-1,083	_0.
Stone.	199	1,236,019	1,240,226	-1,065 +4,207	+0.
Straw and palm leaf goods,	21	2,544,527	2,571,863		
Fallow, candles, soap, and grease,	60	2,049,765	1,806,427	+27,336	+1.
Tobacco, snuff, and cigars,	48	1 '' 1		-243,338	-11.
		1,469,729	1,821,643	-148,086	-10.
Toys and games (children's),	11	263,282	234,494	-28,788	-10.
Frunks and valises,	7	75,188	53,015	-22,178	-29.
Whips, lashes, and stocks,	15	354,883	844,515	10,318	
Wooden goods,	153	2,465,172	2,809,224	—155,94 8	-6.
Woollen goods,	122	14,410,166	11,893,040	-8,017,126	20.
Worsted goods,	27	13,133,003	10,861,550	-2,271,458	-17.

GOODS MADE: BY INDUSTRIES.

GOODS MADE: BY INDUSTRIES.

1895, 1896.

[In this presentation, the figures given under "Value of Goods Made and Work Done" represent the returns made by the same establishments, in each industry, for the years 1895 and 1896, the whole number of establishments considered in "All Industries" being 4,609. Comparison is made, as regards the value of goods made and work done, between these two years. The relative increase or decrease in 1896 as compared with 1895 is given with its equivalent percentage.]

Industries.	Number of Estab- lishments	VALUE OF G	OODS MADE	Increase or Decreasi 189	: (), IN
	Con- sidered	1895	1896	Amounts	Percent- ages
Agricultural implements,	8	\$996,226	\$1,037,054	+\$40,828	+4.10
Arms and ammunition,	12	1,712,184	1,759,564	+47,430	+2.77
Artisans' tools,	69	2,541,463	2,769,200	+227,737	+8.96
Awnings, sails, tents, etc.,	32	363,598	845,665	-17,928	-4.93
Bicycles, tricycles, etc.,	10	8,643,921	8,543,562	-100,359	-2.75
Boots and shoes,	605	89,938,212	87,945,168	-1,993,044	-2.22
Boxes (paper and wooden),	158	5,252,131	4,982,387	-269,744	-5.14
Brick, tiles, and sewer pipe,	56	1,480,245	1,567,785	+87,540	+5.91
Brooms, brushes, and mops,	19	1,210,622	1,193,494	-17,128	-1.41
Burial cases, caskets, coffins, etc., .	7	383,938	368,659	-15,279	
Buttons and dress trimmings, .	15	918,842		-147,948	
Carpetings,	12	7,213,798		-1,539,161	-21.34
Carriages and wagons,	143	4,047,680		-259,334	
Cement, kaolin, lime, and plaster, .	10	324,726		-30,446	
Chemical preparations (compound-		,			
ed),	12	1,222,641	1,018,982	-203,659	-16.66
Clocks, watches, and jewelry, .	99	6,095,952		-704,195	
Clothing	180	18,766,275	, ,	-2,113,278	
Cooking, lighting, and heating ap-		,	,,		-21-20
paratus,	85	2,585,989	2,561,227	-24,762	-0.96
Cordage and twine,	29	4,799,853	5,734,321	+934,468	+19.47
Corks, bungs, and taps,	3	55,582	83,500	+27,968	•
Cotton goods,	169	89,615,751	87,146,004	-2,469,747	-2.76
Cotton, woollen, and other textiles,	2	2,338,683	2,046,877	-292,306	
Crayons, pencils, crucibles, etc., .	4	61,190	58,557	-2,633	
Drugs and medicines.	27	3,918,309	4,004,298	+85,989	
Dyestuffs,	8	746,162	559,269	-186,893	•
Earthen, plaster, and stone ware, .	7	253,114	227,771	-25,343	
Electrical apparatus and appliances,	23	5,837,551	4,589,082	—748,469	-14.02
Electroplating	12	160,667	179,477	+18,810	+11.71
Emery and sand paper and cloth, etc.,	10	694,874	817,058	+122,684	+17.67
Fancy articles, etc.,	11	382,555	823,323	-9,232	-2.78
Fertilizers.	8	233,569	219,845	-13,724	
Fine arts and taxidermy.	8	25,571	80,494	-13,724 +4,923	+19.25
Fireworks and matches,	4	149,510	144,091	-5,419	-3.62
Flax, hemp, jute, and linen goods,	10	3,265,212	3,252,281	-12,931	-0.40
Food preparations	319	41,952,077	40,410,983	-1,541,094	-0.40 -3.67
	119	7,166,132	6,100,549	-1,065,583	-3.07 -14.87
~· '	14	401,158	346,417	-1,000,083 -54,741	
Glass,	1.5	201,100	320,411	-04,741	-13.00

GOODS MADE: BY INDUSTRIES - 1895, 1896 - Concluded.

	Number of	VALUE OF G	OODS MADE	INCREASE OR DECREASE	(-) , 136	
Industries.	Estab- lishments	AND WO	EK DONE	1890	3	
	Con- sidered	1895	1896	Amounts	Percent- ages	
Glue, isinglass, and starch,	23	\$980,557	\$1,079,892	+899,835	+10.13	
Hair work (animal and human), .	7	350,218		-38,668	-11.04	
Hose: rubber, linen, etc.,	4	1,116,341	1,502,996	+386,655	+34.64	
Hosiery and knit goods,	42	6,435,901	5,014,755	-1,421,146	-22.08	
Ink, mucilage, and paste,	7	877,817	358,238	-24,079	-6.38	
Ivory, bone, shell, and horn goods,	·	,				
etc.,	18	978,257	870,299	-107,958	-11.04	
Leather	143	22,379,841		-3,838,297	-14.92	
Liquors and beverages (not spirit-		,0.0,022	20,022,022	5, 555,555		
uous),	28	598,559	484,851	-118,708	-19.00	
Liquors: malt, distilled, and fer-	_	, , , ,		,		
mented	57	10,420,703	10,041,293	379,410	-3.64	
Lumber,	32	2,160,588	1,980,923	-179,665	-8.32	
Machines and machinery,	371	26,027,029		+2,462,891	+9.46	
Metals and metallic goods,	382	24,484,118		-1,011,802	-4.18	
Mixed textiles,	12	1,553,851	1,097,549	-456,302	-29.37	
Models, lasts, and patterns,	49	958,388	946,883	-11,505	-1.20	
Musical instruments and materials,	65	4,928,878	3,922,418	-1,006,455	-20.42	
Oils and illuminating fluids,	9	771,636	811,422	+39,786	+5.16	
Paints, colors, and crude chemicals,	23	1,221,979	1,039,343	-182,636	-14.95	
	123	25,028,375	23,044,582	-1,983,793	—7.93	
Paper and paper goods,	4	219,843	196,365	-1,965,195 -23,478	-10.68	
	*	219,040	190,500	-20,410	-10.00	
Photographs and photographic ma-	24	836,607	846,706	+10,099	+1.21	
terials,	33	1,947,510	1,963,913	+16,403	+0.84	
	33	1,821,010	1,903,913	710,403	70.04	
Printing, publishing, and bookbind-	ا ـــا	4,666,995	4 898 900	80,596	-0.66	
ing,	47	4,000,880	4,636,399		-0.00	
Print works, dye works, and bleach-		22,692,098	00 720 002	1 041 105	0 44	
eries,	47	22,092,080	20,730,903	—1,961,19 5	-8.64	
Railroad construction and equip-		9.047.009	2 010 400	1 970 400	100 50	
ment,	16	3,047,903	3,918,402	+870,499	+28.56	
Rubber and elastic goods,	41	20,515,207 958,816	18,949,724	-1,565,483	—7.68	
Saddlery and harness,	41	900,010	906,212	-47,604	-4.99	
Scientific instruments and appli-		612,360	557 060	E4 907	0.00	
ances,	20	1 .	557,963	—54,397	-8.88	
Shipbuilding,	51 9	724,192 3,195,057	647,824	—76,368	-10.55	
Silk and silk goods,		1	2,907,815	-287,242	-8.99	
Sporting and athletic goods,	9	656,418	628,309	-28,104	-4.28	
Stone,	199	5,813,127 4,326,089	5,522,924	+209,797	+3.95	
Straw and palm leaf goods,	21		4,333,756	+7,667	+0.18	
Tallow, candles, soap, and grease,.	60	3,080,144	2,819,190	—260,954	-8.47	
Tobacco, snuff, and cigars,	48	8,099,229 617,761	2,913,644	-185,585	-5.99	
Toys and games (children's),.	11	1 - :	629,282	+11,521	+1.86	
Trunks and valises,	7	153,100	140,822	—12,278	-8.02	
Whips, lashes, and stocks,	15	1,050,017	984,807	-115,210	-10.97	
Wooden goods,	158	4,913,012	4,600,777	312,235	-6.86	
Woollen goods,	122	24,899,606	19,662,182	-5,237,424	—21.03	
Worsted goods,	27	20,599,046	17,827,246	2,771,800	-13.46	
ALL INDUSTRIES,	. 4,609	\$569,097,021	\$537,720,294	-\$31,376,727	-5.51	

PERSONS EMPLOYED: BY INDUSTRIES.

[25]

SMALLEST, GREATEST, AND AVERAGE NUMBER OF PERSONS EMPLOYED: BY INDUSTRIES

[In this table, by the terms "Periods of employment of smallest number" and "Periods of employment of greatest number" are meant those times, as regards aggregate number of persons employed, when the smallest or greatest number, respectively, was employed. It must be borne in mind that the number of persons here enumerated are wage earners only; officers, clerks, or other salaried persons are not included.]

AGGREGATES - 1895.

Industries.	Number of Estab- lishments	Aggregate Average Number of	PERSONS	ATES OF EMPLOYED IODS OF ENT OF—	Excess of Greatest over
	Con- sidered	Persons Employed	Smallest Number	Greatest Number	Smallest Number
Agricultural implements,	8	543	490	594	104
Arms and ammunition,	12	1,596	1,332	1,805	478
Artisans' tools,	69	1,757	1,571	1,980	409
Awnings, sails, tents, etc.,	32	161	117	255	138
Bicycles, tricycles, etc.,	10	2,037	1,419	2,770	1,851
Boots and shoes,	605	43,180	33,362	52,063	18,701
Boxes (paper and wooden),	158~	3,815	8,234	4,464	1,230
Brick, tiles, and sewer pipe,	56	1,263	587	2,124	1,537
Brooms, brushes, and mops,	19	700	629	752	123
Burial cases, caskets, coffins, etc.,	7	201	188	209	21
Buttons and dress trimmings,	15	768	638	876	238
Carpetings,	12	4,616	4,351	4,794	448
Carriages and wagons,	143	2,178	1,616	2,677	1,061
Cement, kaolin, lime, and plaster,	10	120	102	132	30
Chemical preparations (compounded), .	12	847	817	372	55
Clocks, watches, and jewelry,	99	3,562	2,762	4,338	1,576
Clothing,	130	7,231	5,547	8,513	2,966
Cooking, lighting, and heating apparatus,	35	1,449	1,025	1,761	786
Cordage and twine,	29	2,377	2,009	2,794	785
Corks, bungs, and taps,	8	36	31	40	9
Cotton goods,	169	79,795	78,778	83,545	9,767
Cotton, woollen, and other textiles,	2	1,644	1,583	1,693	110
Crayons, pencils, crucibles, etc.,	4	41	34	46	12
Drugs and medicines,	27	653	449	869	420
Dyestuffs,	8	152	121	178	52
Earthen, plaster, and stone ware,	7	230	165	298	133
Electrical apparatus and appliances, .	23	2,935	2,549	3,301	752
Electroplating,	12	119	87	155	68
Emery and sand paper and cloth, etc., .	10	278	241	319	78
Fancy articles, etc.,	11	239	156	348	192
Fertilizers,	8	49	47	51	4
Fine arts and taxidermy,	3	10	10	14	4

28 STATISTICS OF MANUFACTURES. [Pub. Doc. www.libtool.com.cn

PERSONS EMPLOYED: BY INDUSTRIES — Continued.

SMALLEST, GREATEST, AND AVERAGE NUMBER OF PERSONS EMPLOYED. AGGREGATES—1895—Concluded.

Industries.	Estab- Average lishments Number of		AGGREG PERSONS AT PER EMPLOYM	Excess of Greatest over	
	Con- sidered	Persons Employed	Smallest Number	Greatest Number	Smallest Number
Fireworks and matches,	4	83	43	131	88
Flax, hemp, jute, and linen goods,	10	2,263	2,175	2,363	188
Food preparations,	319	6,784	5,640	9,061	3,421
Furniture,	119	3,502	2,974	4,221	1,247
Glass,	14	346	335	412	77
Glue, isinglass, and starch,	23	848	348	568	220
Hair work (animal and human),	7	149	143	163	20
Hose: rubber, linen, etc.,	4	583	348	892	544
Hosiery and knit goods,	42	5,605	4,774	6,360	1,586
Ink, mucilage, and paste,	7	64	51	97	46
Ivory, bone, shell, and horn goods, etc., .	18	809	547	1,040	493
Leather	143	7,168	5,737	8,502	2,765
Liquors and beverages (not spirituous).	28	192	135	283	148
Liquors: malt, distilled, and fermented,.	57	1,613	1,386	1,903	517
Lumber	32	771	513	994	481
Machines and machinery,	371	16,933	18,449	20,228	6,779
Metals and metallic goods,	382	14,694	12,128	17,138	5,010
Mixed textiles,	12	715	583	845	262
Models, lasts, and patterns,	49	434	368	506	138
Musical instruments and materials,	65	2,240	1,937	2,526	589
Oils and illuminating fluids,	9	96	82	123	41
Paints, colors, and crude chemicals,	23	236	192	266	74
Paper and paper goods,	123	11,647	10,356	12,558	2,202
Perfumes, toilet articles, etc.,	4	29	24	85	2,202
Photographs and photographic materials.	24	481	393	589	196
	33	805	196	362	166
Printing, publishing, and bookbinding	47	2,578	2,343	2,855	512
Print works, dye works, and bleacheries,	47	6,456		' '	926
Railroad construction and equipment,	16	2,456	6,005	6,931 2,828	679
Rubber and elastic goods,	41		2,149		
Saddlery and harness	41	8,392 400	6,746	9,570 464	2,824
•		417	872	463	125
Scientific instruments and appliances, .	20			1	91
Shipbuilding,	51	427	262	708	441
Silk and silk goods,	9	1,849	1,580	1,987	407
Sporting and athletic goods,	9	5,52	320	744	424
Stone,	199	5,055	3,255	6,981	3,726
Straw and palm leaf goods,	21	2,612	683	4,246	3,563
Tallow, candles, soap, and grease,	60	622	568	667	104
Tobacco, snuff, and cigars,	48	1,611	1,262	1,866	604
Toys and games (children's),	11	895	240	559	319
Trunks and valises,	7	88	66	108	42
Whips, lashes, and stocks,	15	875	318	418	100
Wooden goods,	153	2,757	2,170	3,339	1,169
Woollen goods,	122	16,139	13,800	17,622	3,822
Worsted goods,	27	12,297	10,899	13,273	2,374
All Industries,	4,609	807,590	258,776	851,915	93,139

SMALLEST, GREATEST, AND AVERAGE NUMBER OF PERSONS EMPLOYED: BY INDUSTRIES.

[In this table, by the terms "Periods of employment of smallest number" and "Periods of employment of greatest number" are meant those times, as regards aggregate number of persons employed, when the smallest or greatest number, respectively, was employed. It must be borne in mind that the number of persons here enumerated are wage earners only; officers, clerks, or other salaried persons are not included.]

AGGREGATES - 1896.

Industries.	Number of Estab- lishments	Aggregate Average Number of	PERSONS 1	ODS OF	Excess of Greatest over
	Con- sidered	Persons Employed	Smallest Number	Greatest Number	Smallest Number
Agricultural implements,	8	568	394	646	252
Arms and ammunition,	12	1,532	1,279	1,864	585
Artisans' tools,	69	1,842	1,564	2,031	467
Awnings, sails, tents, etc.,	32	155	111	227	116
Bicycles, tricycles, etc.,	10	1,994	812	3,051	2,239
Boots and shoes,	605	42,263	32,679	51,998	19,319
Boxes (paper and wooden),	158	3,699	8,215	4,243	1,028
Brick, tiles, and sewer pipe,	56	1,325	586	2,227	1,641
Brooms, brushes, and mops,	19	694	555	798	243
Burial cases, caskets, coffins, etc.,	7	198	195	201	6
Buttons and dress trimmings,	15	775	585	994	409
Carpetings,	12	4,232	3,417	4,791	1,874
Carriages and wagons,	143	1,972	1,481	2,503	1,022
Cement, kaolin, lime, and plaster,	10	119	93	136	43
Chemical preparations (compounded), .	12	334	286	359	73
Clocks, watches, and jewelry,	99	3,288	2,454	4,112	1,658
Clothing,	130	6,936	5,167	8,350	3,183
Cooking, lighting, and heating apparatus,	85	1,538	1,220	1,818	598
Cordage and twine,	29	2,468	2,105	3,024	919
Corks, bungs, and taps,	3	43	24	58	29
Cotton goods,	169	78,058	66,044	86,494	20,450
Cotton, woollen, and other textiles,	2	1,763	1,600	1,962	362
Crayons, pencils, crucibles, etc.,	4	86	34	37	3
Drugs and medicines,	27	630	446	827	381
Dyestuffs,	8	126	76	185	109
Earthen, plaster, and stone ware	7	209	134	276	142
Electrical apparatus and appliances, .	23	2,705	2,365	3,010	645
Electroplating,	12	128	95	172	77
Emery and sand paper and cloth, etc., .	10	328	268	386	118
Fancy articles, etc.,	11	234	136	366	230
Fertilizers,	8	51	50	54	4
Fine arts and taxidermy,	8	15	14	16	2

30 STATISTICS OF MANUFACTURES. [Pub. Doc. www.libtool.com.cn

PERSONS EMPLOYED: BY INDUSTRIES—Continued.

SMALLEST, GREATEST, AND AVERAGE NUMBER OF PERSONS
EMPLOYED. AGGREGATES—1896—Concluded.

Industries.	Number of Estab- lishments	Aggregate Average Number of	AGGREG PERSONS I AT PERI EMPLOYM	EMPLOYED ODS OF	Excess of Greatest over
	Con- sidered	Persons Employed	Smallest Number	Greatest Number	Smallest Number
Fireworks and matches,	4	94	61	129	. 68
Flax, hemp, jute, and linen goods,	10	2,266	2,038	2,437	399
Food preparations,	319	6,859	5,719	8,624	2,905
Furniture,	119	3,293	2,618	3,919	1,301
Glass,	14	300	115	408	293
Glue, isinglass, and starch,	23	398	808	644	336
Hair work (animal and human),	7	145	131	154	23
Hose: rubber, linen, etc.,	4	745	449	1,179	730
Hosiery and knit goods,	42	5,646	4,523	6,456	1,933
Ink, mucilage, and paste,	7	59	51	68	17
Ivory, bone, shell, and horn goods, etc., .	18	699	546	931	385
Leather,	143	6,347	5,018	8,046	3,028
Liquors and beverages (not spirituous),.	28	177	129	249	120
Liquors: malt, distilled, and fermented, .	57	1,681	1,490	1,994	504
Lumber,	32	731	509	969	460
Machines and machinery,	871	18,082	14,259	21,348	7,089
Metals and metallic goods,	382	14,242	11,740	16,535	4,795
Mixed textiles,	12	668	404	793	389
Models, lasts, and patterns,	49	445	377	540	163
Musical instruments and materials,	65	1,864	1,376	2,265	889
Oils and illuminating fluids,	9	110	82	177	95
Paints, colors, and crude chemicals,	23	202	188	248	60
Paper and paper goods,	123	11,112	9,514	12,243	2,729
Perfumes, toilet articles, etc.,	4	25	22	28	6
Photographs and photographic materials,	24	510	402	610	208
Polishes and dressing	83	805	240	370	130
Printing, publishing, and bookbinding, .	47	2,566	2,297	2,768	471
Print works, dye works, and bleacheries,	47	6,299	5,425	7,025	1,600
Railroad construction and equipment,	16	2,876	2,345	3,338	993
Rubber and elastic goods,	41	7,990	5,415	9,141	3,726
Saddlery and harness,	41	383	315	450	135
Scientific instruments and appliances, .	20	447	394	499	105
Shipbuilding	51	433	253	708	455
Silk and silk goods,	9	1,619	1,180	1.916	736
	9	566	230	794	564
Sporting and athletic goods,	199	5,042	3,216	7,084	3,868
Stone,	21	1 - 1	548	4,207	1
Straw and palm leaf goods,	60	2,466	547	662	3,659
Tallow, candles, soap, and grease,	48	615 1,545	1,215	1,785	115 570
Tobacco, snuff, and cigars,	1	1 1	246	1,785 565	1
Toys and games (children's),	11 7	421 71	246 45	93	319 48
Trunks and valises,	1		1	383	1
Whips, lashes, and stocks,	15	840	278		105
Wooden goods,	153	2,620	2,211	3,128	917
Woollen goods,	122	13,671	10,822	16,701	5,879
Worsted goods,	27	11,318	6,885	13,618	7,283
ALL INDUSTRIES,	4,609	298,546	285,110	853,440	118,330

SMALLEST, GREATEST, AND AVERAGE NUMBER OF PERSONS EMPLOYED: BY INDUSTRIES.

[In this table, averages for each establishment are given. These have been arrived at by dividing the aggregates given in the table on pages 27 and 28 by the number of establishments. It must be borne in mind that the number of persons here enumerated are wage earners only; officers, clerks, or other salaried persons are not included.

AVERAGES - 1895.

	1		AVE	AGES		
	Number of Estab-	NUMBER OF PERSONS EMPLOYED IN EACH ESTABLISHMENT				
Industries.	lishments Con- sidered	Average Number	Smallest Number	Greatest Number	Excess of Greatest over Smallest Number	
Agricultural implements,	8	68	61	. 74	13	
Arms and ammunition,	12	133	111	150	39	
Artisans' tools,	69	25	23	29	6	
Awnings, sails, tents, etc.,	32	5	4	8	4	
Bicycles, tricycles, etc.,	10	204	142	277	135	
Boots and shoes,	605	71	55	86	31	
Boxes (paper and wooden),	158	24	20	28	8	
Brick, tiles, and sewer pipe,	56	23	10	87	27	
Brooms, brushes, and mops,	19	37	33	39	. 6	
Burial cases, caskets, coffins, etc.,	7	29	27	30	3	
Buttons and dress trimmings,	15	51	42	58	16	
Carpetings,	12	885	363	400	37	
Carriages and wagons,	143	15	11	18	7	
Cement, kaolin, lime, and plaster,	10	12	10	13	8	
Chemical preparations (compounded), .	12	29	26	81	5	
Clocks, watches, and jewelry,	99	36	28	44	16	
Clothing,	130	56	4.3	65	22	
Cooking, lighting, and heating apparatus,	35	41	29	50	21	
Cordage and twine,	29	82	69	96	27	
Corks, bungs, and taps,	8	12	10	13	3	
Cotton goods,	169	472	436	494	58	
Cotton, woollen, and other textiles,	2	822	792	847	55	
Crayons, pencils, crucibles, etc.,	4	10	. 9	12	8	
Drugs and medicines,	27	-24	17	32	15	
Dyestuffs,	8	19	15	22	7	
Earthen, plaster, and stone ware,	7	33	24	43	19	
Electrical apparatus and appliances,	23	128	111	144	83	
Electroplating,	12	10	7	13	6	
Emery and sand paper and cloth, etc., .	10	28	24	. 82	8	
Fancy articles, etc.,	11	22	14	. 81	17	
Fertilizers,	3	16	16 .	. 17	1	
Fine arts and taxidermy	3	3	3	4	1	

PERSONS EMPLOYED: BY INDUSTRIES — Continued.

SMALLEST, GREATEST, AND AVERAGE NUMBER OF PERSONS

EMPLOYED. AVERAGES — 1895 — Concluded.

	AVERAGE						
	Number of Estab-	Number (PERSONS ESTABL	EMPLOYER	IN RACH		
Industries.	lishments Con- sidered	Average Number	Smallest Number	Greatest Number	Excess of Greatest over Smallest Number		
Fireworks and matches	4	21	11	38	22		
Flax, hemp, jute, and linen goods,	10	226	217	236	19		
Food preparations,	819	21	17	28	11		
Furniture,	119	29	25	35	10		
Glass,	14	25	24	29	5		
Glue, isinglass, and starch	23	15	15	25	10		
Hair work (animal and human).	7	21	20	23	3		
Hose: rubber, linen, etc.,	4	133	87	223	136		
Hosiery and knit goods	42	183	113	151	38		
Ink, mucilage, and paste,	7	9	7	14	7		
Ivory, bone, shell, and horn goods, etc., .	18	45	80	57	27		
Leather.	143	50	40	59	19		
Liquors and beverages (not spirituous),	28	7	5	10	5		
Liquors: malt, distilled, and fermented.	57	28	24	33	9		
Lumber	32	24	16	31	15		
Machines and machinery,	871	46	86	54	18		
Matala and matallia made	382	38	32	45	13		
Mixed textiles,	12	60	48	70	22		
-	49	9	3 0	10	3		
Models, lasts, and patterns,	65	34	30	39	,		
Musical instruments and materials,		11	9				
Oils and illuminating fluids,	9 23		8	14	5		
Paints, colors, and crude chemicals, .	123	10 95	84	11 102	3		
Paper and paper goods,			6		18		
Perfumes, toilet articles, etc.,	4	7		9	3		
Photographs and photographic materials,	24	20	16	24	8		
Polishes and dressing,	33	9	6	11	5		
Printing, publishing, and bookbinding, .	47	55	50	61	11		
Print works, dye works, and bleacheries,	47	137	128	147	19		
Railroad construction and equipment, .	16	154	134	176	42		
Rubber and elastic goods,	41	205	164	233	69		
Saddlery and harness,	41	10	8	11	3		
Scientific instruments and appliances, .	20	21	19	28	4		
Shipbuilding,	51	8		14	9		
Silk and silk goods,	9	205	176	221	45		
Sporting and athletic goods,	9	61	36	83	47		
Stone,	199	25	16	35	19		
Straw and palm leaf goods,	21	124	32	202	170		
Tallow, candles, soap, and grease,	60	10	9	11	2		
Tobacco, snuff, and cigars,	48	34	26	39	18		
Foys and games (children's),	11	36	22	51	29		
Frunks and valises,	7	18	9	15	6		
Whips, lashes, and stocks,	15	25	21	28	7		
Wooden goods,	158	18	14	22	8		
Woollen goods,	122	132	118	144	31		
Worsted goods,	27	455	404	492	88		
ALL INDUSTRIES,	4,609	67	56	76	20		

SMALLEST, GREATEST, AND AVERAGE NUMBER OF PERSONS EMPLOYED: BY INDUSTRIES.

[In this table, averages for each establishment are given. These have been arrived at by dividing the aggregates given in the table on pages 29 and 30 by the number of establishments. It must be borne in mind that the number of persons here enumerated are wage earners only; officers, clerks, or other salaried persons are not included.]

AVERAGES - 1896.

		AVERAGES				
·	Number of Estab-	NUMBER OF PERSONS EMPLOYED IN EACH ESTABLISHMENT				
	lishments Con- sidered	Average Number	Smallest Number	Greatest Number	Excess of Greatest over Smallest Number	
Agricultural implements,	8	71	49	81	82	
Arms and ammunition,	12	128	106	155	49	
Artisans' tools,	69	27	22	29	7	
Awnings, sails, tents, etc.,	32	5	3	7	4	
Bicycles, tricycles, etc.,	10	199	81	305	224	
Boots and shoes,	605	70	54	86	32	
Boxes (paper and wooden),	158	23	20	27	7	
Brick, tiles, and sewer pipe,	56	24	10	39	29	
Brooms, brushes, and mops,	19	87	29	42	13	
Burial cases, caskets, coffins, etc.,	7	28	28	29	1	
Buttons and dress trimmings,	15	52	39	66	27	
Carpetings,	12	353	285	399	114	
Carriages and wagons,	143	14	10	17	7	
Cement, kaolin, lime, and plaster,	10	12	9	13	4	
Chemical preparations (compounded), .	12	28	24	80	6	
Clocks, watches, and jewelry,	99	83	25	42	17	
Clothing,	130	58	40	64	24	
Cooking, lighting, and heating apparatus,	85	44	35	52	17	
Cordage and twine,	29	85	72	104	32	
Corks, bungs, and taps,	8	14	8	18	10	
Cotton goods,	169	462	391	512	121	
Cotton, woollen, and other textiles,	2	882	800	981	181	
Crayons, pencils, crucibles, etc.,	4	9	8	9	1	
Drugs and medicines,	27	23	17	81	14	
Dyestuffs,	8	16	9	23	14	
Earthen, plaster, and stone ware,	7	30	19	89	20	
Electrical apparatus and appliances, .	23	118	103	131	28	
Electroplating,	12	11	8	14	6	
Emery and sand paper and cloth, etc., .	10	83	27	39	12	
Fancy articles, etc.,	11	21	12	83	21	
Fertilizers,	. 3	17	17	18	1	
Fine arts and taxidermy,	3	5	4	5	1	

84 STATISTICS OF MANUFACTURES. [Pub. Doc. www.libtool.com.cn

PERSONS EMPLOYED: BY INDUSTRIES—Continued.

SMALLEST, GREATEST, AND AVERAGE NUMBER OF PERSONS
EMPLOYED. AVERAGES—1896—Concluded.

			AVE	RAGES	
	Number of Estab-	NUMBER OF PERSONS EMPLOYED IN EAC ESTABLISHMENT			
Industries.	lishments Con- sidered	Average Number	Smallest Number	Greatest Number	Excess of Greatest over Smallest Number
Fireworks and matches,	4	24	15	32	17
Flax, hemp, jute, and linen goods,	10	227	204	244	40
Food preparations,	319	22	18	27	9
Furniture	119	28	22	33	11
Glass,	14	21	8	29	21
Glue, isinglass, and starch,	23	17	13	28	15
Hair work (animal and human),	7	21	19	22	3
Hose: rubber, linen, etc.,	4	186	112	295	183
Hosiery and knit goods,	42	134	108	154	46
Ink, mucilage, and paste,	7	8	7	9	2
Ivory, bone, shell, and horn goods, etc., .	18	39	30	51	21
	143	44	35	56	21
Liquors and beverages (not spirituous).		6	5	9	4
Liquors : malt, distilled, and fermented, .	28 57	29	26	35	9
		23	16	30	14
	32	49	38	57	19
Machines and machinery,	371			43	12
Metals and metallic goods,	382	37	81	66	82
Mixed textiles,	12	56	34		
Models, lasts, and patterns,	49	9	8	11	8
Musical instruments and materials,	65	29	21	35	14
Oils and illuminating fluids,	9	12	9	20	11
Paints, colors, and crude chemicals, .	23	9	8	11	3
Paper and paper goods,	123	90	77	99	22
Perfumes, toilet articles, etc.,	4	6	5	7	2
Photographs and photographic materials,	24	21	17	25	8
Polishes and dressing,	88	9	7	11	4
Printing, publishing, and bookbinding, .	47	55	49	59	10
Print works, dye works, and bleacheries,	47	134	115	149	34
Railroad construction and equipment, .	16	180	147	209	62
Rubber and elastic goods,	41	195	132	223	91
Saddlery and harness,	41	9	8	11	3
Scientific instruments and appliances, .	20	22	20	25	5
Shipbuilding,	51	8	5	14	9
Silk and silk goods,	9	180	131	213	82
Sporting and athletic goods,	9	63	25	88	63
Stone,	199	25	16	35	19
Straw and palm leaf goods,	21	117	26	200	174
Tallow, candles, soap, and grease,	60	10	. 9	11	2
Tobacco, snuff, and cigars,	48	32	25	37	12
Toys and games (children's),	11	38	22	51	29
Trunks and valises,	7	10	6	13	7
Whips, lashes, and stocks,	15	23	19	26	7
Wooden goods,	153	17	14	20	6
Woollen goods,	122	112	89	137	48
Worsted goods,	27	419	234	504	270
ALL INDUSTRIES	4,609	65	51	77	26

RANGE OF EMPLOYMENT AND UNEM-PLOYMENT: BY INDUSTRIES.

1895, 1896,

[In this presentation, the excess of greatest over smallest number of persons employed for 1895 and 1896 is brought forward from the tables on pages 27 to 30 inclusive, and a comparison is made between the two years. The relative increase or decrease in the excess of greatest number over smallest number employed in 1896 as compared with 1895 is given with its equivalent percentage. It must be borne in mind that the persons here enumerated are wage earners only; officers, clerks, or other salaried persons are not included.]

Industries.	Number of Estab- lishments	OVER SI NUMBER O	Greatest Mallest F Persons Oyed	Increase (+), or Decrease (-), in 1896		
	Con- sidered	1895	1896	Number	Percent- ages	
Agricultural implements,	8	104	252	+148	+142.31	
Arms and ammunition,	12	478	585	+112	+23.68	
Artisans' tools,	69	409	467	+58	+14.18	
Awnings, sails, tents, etc.,	32	138	116	-22	-15.94	
Bicycles, tricycles, etc.,	10	1,351	2,239	+888	+65.73	
Boots and shoes,	605	18,701	19,319	+618	+3.30	
Boxes (paper and wooden),	158	1,230	1,028	-202	-16.42	
Brick, tiles, and sewer pipe,	56	1,537	1,641	+104	+6.77	
Brooms, brushes, and mops,	19	123	243	+120	+97.56	
Burial cases, caskets, coffins, etc.,	7	21	. 6	-15	-71.43	
Buttons and dress trimmings,	15	238	409	+171	+71.85	
Carpetings,	12	443	1,374	+931	+210.16	
Carriages and wagons,	143	1,061	1,022	-39	-3.68	
Cement, kaolin, lime, and plaster,	10	30	43	+13	+43.88	
Chemical preparations (compounded), .	12	55	78	+18	+32.73	
Clocks, watches, and jewelry,	99	1,576	1,658	+82	+5.20	
Clothing,	130	2,966	3,183	+217	+7.32	
Cooking, lighting, and heating apparatus,	85	736	598	-138	-18.75	
Cordage and twine,	29	785	919	+134	+17.07	
Corks, bungs, and taps,	8	9	29	+20	+222.22	
Cotton goods,	169	9,767	20,450	+10,683	+109.38	
Cotton, woollen, and other textiles,	2	110	362	+252	+229.09	
Crayons, pencils, crucibles, etc.,	4	12	. 3	-9	-75.00	
Drugs and medicines,	27	420	381	-39	-9.29	
Dyestuffs,	8	52	109	+57	+109.62	
Earthen, plaster, and stone ware,	7	133	142	+9	+8.77	
Electrical apparatus and appliances, .	23	752	645	-107	-14.23	
Electroplating,	12	68	77	+9	+13.24	
Emery and sand paper and cloth, etc., .	10	78	118	+40	+51.28	
Fancy articles, etc.,	11	192	230	+38	+19.79	
Fertilizers,	8	4	4	*-	*_	
Fine arts and taxidermy,	8	4	2	_2	-50.00	
Fireworks and matches,	4	88	68	20	-22.73	

36 STATISTICS OF MANUFACTURES. [Pub. Doc. www.libtool.com.cn

PERSONS EMPLOYED: BY INDUSTRIES—Continued.

RANGE OF EMPLOYMENT AND UNEMPLOYMENT: BY INDUSTRIES—1895, 1896—Concluded.

Industries.	Number of Estab- lishments	OVER SI NUMBER O	GREATEST MALLEST F PERSONS OYED	OR DECRE	se (+), ase (-), in 196
	Con- sidered	1895	1896	Number	Percent- ages
Flax, hemp, jute, and linen goods,	10	188	899	+211	+112.23
Food preparations,	819	8,421	2,905	516	-15.08
Furniture,	119	1,247	1,301	+54	+4.83
Glass,	14	77	293	+216	+280.52
Glue, isinglass, and starch,	23	220	336	+116	+52.73
Hair work (animal and human),	7	20	23	+3	+15.00
Hose: rubber, linen, etc.,	4	544	730	+186	+34.19
Hosiery and knit goods,	42	1,586	1,933	+347	+21.88
Ink, mucilage, and paste,	7	46	17	-29	-63.04
Ivory, bone, shell, and horn goods, etc.,	18	493	885	-108	-21.91
Leather,	143	2,765	3,028	+263	+9.51
Liquors and beverages (not spirituous),	28	148	120	-28	-18.92
Liquors: malt, distilled, and fermented,	57	517	504	-13	-2.51
Lumber,	32	481	460	-21	-4.37
Machines and machinery,	371	6,779	7,089	+310	+4.57
Metals and metallic goods.	382	5,010	4,795	-215	-4.29
Mixed textiles,	12	262	389	+127	+48.47
Models, lasts, and patterns,	49	138	163	+25	+18.12
Musical instruments and materials.	65	589	889	+300	+50.93
Oils and illuminating fluids,	9	41	95	+54	+131.71
Paints, colors, and crude chemicals.	23	74	60	-14	-18.92
Paper and paper goods,	123	2,202	2,729	+527	+23.93
Perfumes, toilet articles, etc.	4	11	6	-5	-45.45
Photographs and photographic materials,	24	196	208	+12	+6.12
Polishes and dressing,	33	166	130	-36	-21.69
Printing, publishing, and bookbinding, .	47	512	471	-41	-8.01
Print works, dye works, and bleacheries,	47	926	1,600	+674	+72.79
Railroad construction and equipment, .	16	679	993	+314	+46.24
Rubber and elastic goods,	41	2,824			+31.94
Saddlery and harness	41	125	3,726 135	+902 +10	+8.00
Scientific instruments and appliances,	20	91	105		+15.38
Shipbuilding,	51	441	455	+14 +14	+3.17
Silk and silk goods,	9	407	736		+80.84
Enouting and athlatic goods	9	407	736 564	+329	+33.02
Stone,	199			+140	+3.81
Straw and palm leaf goods.	21	8,726	3,868	+142	+2.69
Tallow, candles, soap, and grease,		3,563	3,659	+96	
Tobacco, snuff, and cigars,	60 48	104 604	115	+11 34	+10.58
Toys and games (children's),	48 11	819	570 319	84	-5.63 *-
Trunks and vallses,	1 i				
Whime looken and stacks	7	42	48	+6	+14.29
	15	100	105	+5	+5.00
Wooden goods,	153	1,169	917	—252	-21.56
Manakad manda	122	8,822	5,879	+2,057	+53.82
• ,	27	2,874	7,288	+4,909	+206.78
ALL INDUSTRIES,	4,609	93,139	118,880	+25,191	+27.05

PERSONS EMPLOYED: BY INDUSTRIES. AGGREGATES, BY MONTHS.

1895, 1896,

[This presentation shows the aggregate number of persons employed, by sex, during each month of the years 1895 and 1896, for all the establishments considered in each industry.]

AGRICULTURAL IMPLEMENTS. [8 Establishments.]

							1995	ij	1896			
Монтив.						Males	Females	Totals	Males	Females	Totals	
January,					•	546	_	546	631	_	631	
February,					.	547	-	547	640	-	640	
March,			•		- 1	556	-	556	627	-	627	
April, .					.	560	-	560	611	-	611	
May, .						549	-	549	612	1 - 1	612	
June, .					- 1	545	-	545	570	1 - 1	570	
July, .					٠.	521	-	521	447	1 - 1	447	
August,						493	- 1	493	411	- '	411	
Beptember,			•		-!	496	-	496	504	· • •	504	
October,					.	559	- 1	559	578	- '	578	
November,					-	567	-	567	502	- ,	562	
December.					.	561	- 1	581	617	-	617	

ARMS AND AMMUNITION. [12 Establishments.]

			. 1	1,876	170	1,546	1,209	120	1,399
				1,378	171	1,549	1,244	132	1,376
				1,433	159	1,592	1,306	122	1,428
				1,478	159	1,687	1,277	155	1,532
			- 1	1,468	154	1,622	1,848	146	1,489
			.	1,471	162	1,688	1,382	155	1,587
			.	1,448	163	1,611	1,382	155	1,537
		-	• '	1,498	156	1,654	1,396	171	1,567
, -			• '	1,446	126	1,572	1,439	166	1,605
				1,457	170	1,627	1,492	128	1,620
, .		-		1,365	175	1,540	1,581	112	1,648
				1,361	178	1,539	1,586	110	1,646
	 				. 1,378 . 1,433 . 1,478 . 1,408 . 1,448 . 1,446 . 1,446 . 1,446 . 1,457 . 1,865			. 1,378 171 1,549 1,244 . 1,433 159 1,592 1,306 . 1,478 159 1,637 1,277 . 1,468 154 1,622 1,343 . 1,471 162 1,633 1,382 . 1,448 163 1,611 1,382 . 1,446 126 1,554 1,396 . 1,446 126 1,572 1,499 . 1,457 170 1,627 1,492 . 1,365 175 1,540 1,531	1,878 171 1,549 1,244 132 1,483 159 1,592 1,306 122 1,478 159 1,637 1,877 155 1,468 154 1,022 1,843 146 1,471 162 1,633 1,882 155 1,448 163 1,611 1,382 155 1,448 156 1,654 1,896 171 1,446 126 1,572 1,499 166 1,457 170 1,627 1,492 128 1,365 175 1,540 1,531 112

38 STATISTICS OF MANUFACTURES. [Pub. Doc.

www.libtool.com.cn

PERSONS EMPLOYED: BY INDUSTRIES—Continued.

AGGREGATES, BY MONTHS—1895, 1896—Continued.

ARTISANS' TOOLS. [69 Establishments.]

							1895		1896			
Months.						Males	Females	Totals	Males	Females	Totals	
January,		•	•			1,671	60	1,781	1,851	53	1,904	
February,					.	1,682	60	1,742	1,881	51	1,932	
March,			•		.	1,669	61	1,730	1,863	53	1,916	
April, .			•		.	1,442	62	1,504	1,840	58	1,893	
May, .			. •	•	.	1,463	60	1,523	1,805	55	1,860	
June, .			٠.			1,677	61	1,738	1,795	55	1,850	
July, .			•	•		1,681	59	1,740	1,766	47	1,813	
August,			•	•	- 1	1,729	61	1,790	1,708	53	1,761	
Sep te mber	, .		•	•	.	1,776	61	1,837	1,652	55	1,707	
October,			•	•	.	1,827	61	1,888	1,743 •	55	1,798	
November,				•	. [1,838	60	1,898	1,770	56	1,826	
December,					.	1,848	59	1,907	1,782	51	1,833	

AWNINGS, SAILS, TENTS, ETC. [32 Establishments.]

						!			1	l	
January,						109	32	141	95	84	129
February,			•			98	30	128	99	85	134
March,			•			186	89	175	112	41	153
April, .						112	45	157	112	47	159
May, .		•				117	48	165	121	55	176
June, .						133	47	180	126	54	180
July, .						132	45	177	119	46	165
August,						108	36	144	113	37	150
September	, .					139	84	178	106	34	140
October,	•					149	29	178	109	36	145
November						131	82	163	123	37	160
December,	•	•	•	•	•	118	31	149	107	85	142

BICYCLES, TRICYCLES, ETC. [10 Establishments.]

				- 1	ì	1		1 1		
January,					1,865	84	1,949	2,835	54	2,389
February,					2,082	95	2,127	2,541	64	2,605
March,					2,339	122	2,461	2,687	78	2,760
April, .				.	2,877	105	2,482	2,830	77	2,907
May, .	•				2,551	110	2,661	2,774	76	2,850
June, .				.	2,121	84	2,205	2,220	52	2,272
July, .				.	1,677	66	1,743	1,840	80	1,370
August,				.	1,442	50	1,492	1,003	41	1,044
September,				.	1,563	99	1,662	943	36	979
October,		•			1,670	78	1,748	1,163	38	1,201
November,				.	1,773	72	1,845	1,503	84	1,537
December,		•			1,992	83	2,075	1,971	41	2,012
				- 1	1	- 1	10	1 1		

PERSONS EMPLOYED: BY INDUSTRIES — Continued.

AGGREGATES, BY MONTHS — 1895, 1896 — Continued.

BOOTS AND SHOES. [605 Establishments.]

	Момтие						1895		1896			
Months.						Males	Females	Totals	Males	Females	Totals	
January,						29,629	12,929	42,558	28,360	12,743	41,103	
February,					.	29,741	12,878	42,614	29,565	13,366	42,931	
March,						80,664	13,361	44,025	29,979	13,216	43,195	
April, .						30,776	13,375	44,151	30,350	13,379	43,729	
May, .					.	30,677	13,605	44,282	30,200	13,545	43,745	
June, .					.	31,253	13,613	44,866	29,932	13,339	43,271	
July, .		٠.			.	30,589	13,112	43,701	28,979	12,699	41,678	
August,					.	31,044	13,499	44,543	29,370	13,189	42,559	
September	, .				.	30,217	13,125	43,342	29,327	13,196	42,528	
October,						28,920	12,578	41,498	28,931	13,143	42,074	
November,	, .					28,460	12,391	40,851	27,371	12,366	39,737	
December,						28,597	12,603	41,200	27,673	12,574	40,247	

BOXES (PAPER AND WOODEN). [158 Establishments.]

			- 1	1	I	- 11	l l		
January,			.	2,047	1,694	3,741	2,095	1,691	3,786
February,			.	2,070	1,702	3,772	2,088	1,671	3,759
March,			.	2,086	1,738	3,824	2,109	1,673	3,782
April, .		•	.	2,142	1,783	3,875	2,113	1,672	3,785
May, .			.	2,142	1,748	3,890	2,133	1,671	3,804
June, .			.	2,086	1,724	3,810	2,081	1,658	3,739
July, .			.	1,978	1,670	3,648	1,972	1,597	3,569
August,			.	1,962	1,656	3,618	1,895	1,559	3,454
September	, .		.	2,023	1,769	3,792	1,921	1,618	3,539
October,			.	2,118	1,835	3,953	2,023	1,668	8,691
November	, .		.	2,118	1,797	3,915	2,059	1,641	3,700
December,				2,094	1,764	3,858	2,079	1,651	3,730
			- 1	!		- 11		J	

BRICK, TILES, AND SEWER PIPE. [56 Establishments.]

January,					451	5	456	468	5	473
February,					460	5	465	489	5	494
March,					492	5	497	507	5	512
April, .				.	1,117	5	1,122	1,294	5	1,299
Мау, .					1,980	5	1,985	2,063	5	2,068
June, .				.	2,022	5	2,027	2,147	5	2,152
July, .				.	1,998	4	2,002	2,115	4	2,119
August,				.	1,891	4	1,895	2,077	4	2,081
September	, .			.	1,817	4	1,821	1,853	4	1,857
October,				.	1,443	5	1,448	1,363	4	1,367
November	, .			.	839	5	844	861	4	865
December,			. •	. 1	571	5	576	578	4	582

40 STATISTICS OF MANUFACTURES. [Pub. Doc.

WWW.libtool.com.cn
PERSONS EMPLOYED: BY INDUSTRIES—Continued. AGGREGATES, BY MONTHS-1895, 1896-Continued. BROOMS, BRUSHES, AND MOPS. [19 Establishments.]

						1895		1896			
	M	ONTH	3.		Males	Females	Totals	Males	Females	Totals	
January,					383	299	682	387	310	697	
February,				.	892	308	700	395	326	721	
March,				. [398	315	713	386	325	711	
April, .				. [401	821	722	395	334	729	
Мау, .				.	385	315	700	373	325	698	
June, .				.	390	313	703	369	322	691	
July, .					887	298	685	304	259	563	
August,				.	373	295	668	343	277	620	
September	, .				376	295	671	357	300	657	
October,				.	389	307	696	394	324	718	
November	, .				406	815	721	408	338	746	
December.				٠. ١	417	311	728	428	350	778	

BURIAL CASES, CASKETS, COFFINS, ETC. [7 Establishments.]

				1	t t	. 1			
January,				179	19	198	179	20	199
February,				179	19	198	177	20	197
March,				184	19	203	178	·20	198
April, .				180	19	199	178	20	198
May, .				183	19	202	177	20	197
June, .		· .		186	19	205	178	20	198
July, .				179	17	196	178	20	198
August,				178	15	193	176	19	195
September	, .			183	19	202	179	19	198
October,				187	20	207	179	19	198
November	, .			186	20	206	180	19	199
December,				188	20	208	180	19	199
					• 1	18			

BUTTONS AND DRESS TRIMMINGS. [15 Establishments.]

December.					!	299	482	781	328	427	755
November	, .			•		823	526	849	301	422	723
October,			•	•		297	506	803	282	,414	696
September	, .		•	•		285	467	752	284	411	695
August,		•		•		281	466	747	301	399	700
July, .					.	277	461	738	317	412	729
June, .					.]	280	485	765	838	438	776
May, .					.]	272	492	764	331	465	796
April, .						284	486	770	846	471	817
March,					.	293	482	775	352	478	830
February,					.	286	460	746	358	503	861
January,					.	265	465	730	380	541	921

PERSONS EMPLOYED: BY INDUSTRIES - Continued. AGGREGATES, BY MONTHS - 1895, 1896 - Continued.

CARPETINGS. [12 Establishments.]

						1895			1896	
	M	ORTH	8.	- 1	Males	Females	Totals	Males	Females	Totals
January,					2,182	2,519	4,701	2,152	2,472	4,624
February,					2,184	2,491	4,675	2,174	2,362	4,536
March,				-	2,083	2,460	4,543	2,191	2,285	4,476
April, .					2,101	2,385	4,486	2,115	2,294	4,400
May, .					2,152	2,369	4,521	2,165	2,411	4,576
June, .				- 1	2,209	2,468	4,677	2,153	2,419	4,572
July, .					2,206	2,450	4,656	2,178	2,298	4,476
August,				- !	2,251	2,416	4,667	2,073	2,058	4,161
September,	, .			-	2,201	2,426	4,627	1,556	1,363	2,919
October,				٠. ١	2,235	2,400	4,635	1,891	1,793	3,684
Nove mbe r,					2,151	2,377	4,528	2,047	2,035	4,082
December,				. '	2,238	2,438	4,676	2,126	2,163	4,289

CARRIAGES AND WAGONS. [143 Establishments.]

			1	1		1		
			2,116	20	2,136	2,047	20	2,067
			2,206	22	2,228	2,116	22	2,138
			2,356	24	2,380	2,209	20	2,229
			2,470	23	2,493	2,331	22	2,353
		. 1	2,507	18	2,525	2,368	22	2,390
			2,426	19	2,445	2,252	19	2,271
			2,011	13	2,024	1,820	12	1,832
			1,936	10	1,946	1,686	11	1,697
		.	1,906	11	1,917	1,599	6	1,607
		. [1,915	11 '	1,926	1,590	9	1,599
		٠,	1,936	9	1,945	1,626	10	1,636
		. 1	1,979	14	1,993	1,695	13	1,708

CEMENT, KAOLIN, LIME, AND PLASTER. [10 Establishments.]

										;	
January,	-	•				108	-	106	169	-	109
February,					- 1	108	- i	106	108	-	108
March,					.	118	- '	118	98	- 1	98
April, .	•				-	126	- .	126	118	- i	118
May, .			•		- '	128	-	123	125	<u>-</u>	125
June, .						127	- '	127	127	- !	127
July, .					• !	122	-	122	126	- '	126
August,					• '	125	- ,	125	125	-	125
September	, -			-	. 1	126	- !	126	125	-	125
October,		-			• '	124	- '	124	130	- ;	130
November	, -		•			123	-	123	128	- 1	128
December,						116	- '	116	105	-	105
										<u></u>	

42 STATISTICS OF MANUFACTURES. [Pub. Doc.

www.libtool.com.cn

PERSONS EMPLOYED: BY INDUSTRIES—Continued.

AGGREGATES, BY MONTHS—1895, 1896—Continued.

CHEMICAL PREPARATIONS (COMPOUNDED). [12 Establishments.]

						1895		1896			
	M	ONTH	B.		Males	Females	Totals	· Males	Females	Totals	
January,			•		344	2	346	342	2	344	
February,				.	343	2	345	338	1	339	
March,				.	349	2	351	337	1	338	
April, .				.	338	2	340	331	2	333	
Мау, .					327	2	329	342	2	344	
June, .				.	343	2	345	341	3	344	
July,				.	353	2	355	314	8	317	
August,				.	358	2	360	308	8	311	
September				.	351	2	353	306	8	309	
October,	•			.	350	2	352	324	2 .	326	
November	, .			.	348	2	350	346	2	348	
December,				٠.١	340	2	342	842	2 .	344	

CLOCKS, WATCHES, AND JEWELRY. [99 Establishments.]

			T		1	1	1		
January,			.	2,486	1,189	3,675	2,426	1,173	3,599
February,			.	2,518	1,241	3,759	. 2,455	1,163	3,618
March,			.	2,407	1,197	3,604	2,352	1,126	3,478
April, .			.	2,194	1,047	3,241	2,213	1,029	3,242
May, .				2,177	1,049	3,226	2,172	992	3,164
June, .			.	2,309	1,224	3,533	2,199	1,035	3,234
July, .				2,306	1,248	3,554	2,059	988	3,047
August,				2,194	1,200	3,394	1,923	930	2,853
September	, .			2,362	1,248	3,610	2,069	921	2,990
October,				2,493	1,256	3,749	2,191	954	3,145
November			.	2,469	1,229	3,698	2,381	1,031	3,412
December	, .		.	2,476	1,159	3,635	2,455	1,077	3,532
			- 1				1		

CLOTHING. [130 Establishments.]

December,	•					2,350	4,959	7,309	1,925	4,912	6,837
November	, .					2,375	5,159	7,534	2,008	5,018	7,026
October,						2,368	5,365	7,733	2,009	5,263	7,272
September	, .	•		•		2,302	5,000	7,302	1,990	5,034	7,024
August,	•	•	•	•		2,278	4,406	6,684	1,951	4,263	6,214
July, .		•	•		- 1	2,210	4,043	6,253	1,896	3,942	5,838
June, .			•	•	.	2,207	5,016	7,223	1,944	4,918	6,862
Мау, .	·	•	•	•	-	2,198	5,233	7,431	1,980	5,209	7,189
April, .	•.	•	•	•		2,220	5,286	7,506	2,029	5,267	7,296
March,	•	•	•	•	•	2,253	5,377	7,630	2,048	5,338	7,381
February,		•	•	•		2,256	4,979	7,235	2,083	5,226	7,309
January,	•	•	•	•	•	2,181	4,706	6,887	2,041	4,908	6,949

No. 36.] PERSO www.libtool.com.cn

PERSONS EMPLOYED: BY INDUSTRIES - Continued. AGGREGATES, BY MONTHS - 1895, 1896 - Continued. COOKING, LIGHTING, AND HEATING APPARATUS. [35 Establishments.

			_							
-						1895			1896	
3	IONTH				Males	Females	Totals	Males	Females	Totals
January, .					1,187	4	1,191	1,857	4	1,361
February, .					1,169	5	1,174	1,403	5	1,408
March, .					1,385	5	1,390	1,463	5	1,468
April,					1,401	5	1,406	1,473	5	1,478
May,					1,437	5	1,442	1,503	5	1,508
June,					1,452	5	1,457	1,547	6	1,553
July,					1,300	5	1,305	1,463	6	1,469
August, .					1,488	5	1,493	1,532	6	1,538
September, .					1,645	5	1,650	1,684	7	1,641
October, .					1,663	5	1,668	1,716	7	1,728
November, .					1,613	5	1,618	1,662	6	1,668
December, .	•	•	•	•	1,585	5	1,590	1,611	6	1,617
	C	ORD	A.G.	E .	AND T	WINE.	[29 Esta	blishmer	nts.]	
January, .					1,179	1,019	2,198	1,397	1,104	2,501
February, .					1,150	1,039	2,189	1,407	1,168	2,578
March, .					1,176	1,066	2,242	1,626	1,203	2,829
April,					1,202	1,118	2,320	1,652	1,236	2,888
May,					1,238	1,123	2,361	1,688	1,186	2,874
June,					1,231	1,049	2,280	1,657	1,173	2,830
July,					1,229	1,063	2,292	1,598	1,056	2,654
August, .					1,439	1,139	2,578	1,146	984	2,130
September,.					1,487	1,128	2,615	1,037	958	1,998
October					1,490	1,128	2,618	1,030	977	2,007
November, .		•		•	1,408	1,086	2,494	1,172	996	2,168
December, .					1,210	987	2,197	1,174	976	2,150
	COI	RKS,	В	JN	GS, AN	D TAPS	. [3 Es	tablishm	ents.]	
_		•		•	84	8	87	25	4	29
				•	34	8	87	23	1	24
	•				33		86	1 88	12	4.0
February, .	•		•	•	- 33	3		-		ľ
February, . March, .		•	:	:	33 84	8	87	82	12	ľ
February, . March, . April, . May,	•				1	1		-		44
February, . March, . April, . May,	•		•	•	84	8	87	82	12	44
February, . March, . April, . May, June,	•		•	•	84 85	8 3	37 38	82 82	12 12	44 44 45
February, . March, . April, May, June,	•		:	•	84 85 85	8 3 4	37 88 39	32 32 36	12 12 12	44 44 45
February, . March, . April, May, June, July, August, .	•		:	•	84 85 85 84	8 3 4 4	37 38 39 38	82 82 86 85	12 12 12 12	4: 4: 4: 4:
February, . March, . April, . May, . June, . July, . August, . September, .	•	•		:	84 85 85 34 84	8 3 4 4 4	37 38 39 38 38	32 32 36 35 35	12 12 12 12 12	44 44 44 44 44
March, . April, . May, . June, . July, . August, . September, .	•	•	:	:	84 85 85 84 84	8 3 4 4 4 8	37 38 39 38 38 38	32 32 36 35 35	12 12 12 12 12 12	44 44 48 47 47 47

44 STATISTICS OF MANUFACTURES. [Pub. Doc. www.libtool.com.cn

PERSONS EMPLOYED: BY INDUSTRIES—Continued.

AGGREGATES, BY MONTHS—1895, 1896—Continued.

							1895		1	1896	
	Me)NTH8	3.			Males	Females	Totals	Males	Females	Totals
January,						39,197	40,820	80,017	40,823	41,182	82,005
February,					.	39,246	40,827	80,073	40,864	41,195	82,059
March,					.	39,550	40,863	80,413	40,909	41,291	82,200
April, .					.	39,363	40,938	80,301	40,346	40,644	80,990
Мау, .						39,282	41,019	80,301	39,964	40,359	80,323
June, .						39,389	40,697	80,086	39,586	89,769	79,355
July, .						38,619	39,713	78,332	37,592	37,094	74,686
August,					.	38,288	39,462	77,750	33,670	83,026	66,696
September,	•				•	39,178	40,244	79,422	35,736	35,519	71,255
October,					.	39,124	40,293	79,417	38,921	39,020	77,941
November,						39,761	40,953	80,714	39,567	39,663	79,230
December,	•	•	•	•	•	39,785	40,986	80,771	40,332	40,559	80,891
сотто	N,	w	OOL	LE	Ν,	AND O	THER T	EXTILE	S. [2 I	Establishr	nents.
January,						750	865	1,615	828	805	1,633

		- 1		1	li.	1	1	
January, .			750	865	1,615	828	805	1,633
February, .			757	872	1,629	871	865	1,736
March, .			782	905	1,687	887	900	1,787
April			782	900	1,682	907	896	1,803
Мау,		.	774	902	1,676	895	877	1,772
June,		.	762	883	1,645	875	886	1,761
July,		.	742	873	1,615	883	873	1,756
August, .			740	880	1,620	905	894	1,799
September,.		.	755	860	1,615	906	923	1,829
October, .			769	857	1,626	960	978	1,938
November, .		.	665	1,012	1,677	833	837	1,670
December, .		.	761	880	1,641	884	834	1,668
•		- 1			- 11	i i		

CRAYONS, PENCILS, CRUCIBLES, ETC. [4 Establishments.]

				i		1	1 :		
January,				17	23	40	21	15	36
February,				19	23	42	21	15	36
March,			•	22	23	45	21	15	86
April, .				22	24	46	21	15	86
May, .				21	24	45	20	15	35
June, .				21	24	45	19	15	34
July, .				22	24	46	18	15	33
August,				18	24	42	17	15	32
September				18	24	42	20	15	85
A				18	16	34	21	15	86
November.				16	16	32	21	15	36
December,				16	16	82	21	15	36
,				1		1			

PERSONS EMPLOYED: BY INDUSTRIES - Continued. AGGREGATES, BY MONTHS - 1895, 1896 - Continued.

DRUGS AND MEDICINES. [27 Establishments.]

		וע	.008	AN	ע	MEDI	CINES.	[21 E30	aonsnme	uus. j	
							1895			1896	
	Mo	NTH	3.			Males	Females	Totals	Males	Females	Totals
January,						296	230	526	800	227	527
February,					.	306	242	548	304	250	554
March,					.	323	261	584	326	248	574
April, .					.	403	800	703	405	289	694
May, .					.	369	281	650	367	269	636
June, .					.	369	266	635	363	. 254	617
July, .					.	294	229	523	299	217	516
August,					.	341	192	533	854	190	544
eptember,					.	420	343	763	407	305	719
					.	432	377	809	408	352	760
November,			:		$\cdot \mid$	419	870	789	420	323	742
December,						385	361	746	381	292	678
									1	l,	
				DY	es'	TUFFS	Г 8 Т Е «	ta blishm	ents 1		
					1		. [0 123	- Caorisiiii	cuos.]	1	
January,					.	140	11	151	124	10	134
February,					.	123	15	138	124	• 13	137
March,					.	189	17	156	107	13	120
April, .					.	135	17	152	106	13	119
May, .					.	137	17	154	116	13	129
June, .					.	133	16	149	91	14	108
July, .		٠.			.	133	16	149	125	14	139
August,				•		138	16	154	108	12	120
September,					١.	140	15	155	77	17	94
October,			•		.	143	15	158	109	17	126
November,				•		143	14	157	113	20	133
December,			•		.	139	14	153	120	25	145
							· ,		<u> </u>		
EART	н	en.	PT.A	STI	Z.D	AND	STONE	WARE	Γ7 TEα	t a blishme	nts 1
					1		1	17 111023	1		
January,					.	159	13	172	131	12	143
Febru ary ,			•	•	.	200	15	215	129	12	141
March,	•	•	•		.	163	13	176	136	12	148
April, .						178	17	195	198	13	211
May, .				• '	.	255	17	272	220	15	238
une, .					.	239	17	256	236	15	251
uly, .					.	247	18	265	232	25	257
					.	266	21	287	246	25	271
eptember,					.	228	19	247	248	25	278
					.	224	. 21	245	181	25	200
November,					.	201	22	223	200	25	22
December,					- 1	191	15	206	140	17	157

38 STATISTICS OF MANUFACTURES. [Pub. Doc. www.libtool.com.cn

PERSONS EMPLOYED: BY INDUSTRIES — Continued.

AGGREGATES, BY MONTHS — 1895, 1896 — Continued.

ARTISANS' TOOLS. [69 Establishments.]

	_ :						1895		1896			
	M	HTH	B.			Males	Females	Totals	Males	Females	Totals	
January,						1,671	60	1,781	1,851	58	1,904	
February,					٠.	1,682	60	1,742	1,881	51	1,932	
March,		•			.	1,669	61	1,730	1,863	53	1,916	
April, .		•	•			1,442	62	1,504	1,840	53	1,893	
May, .			. •		.	1,463	60	1,523	1,805	55	1,860	
June, .			٠.			1,677	61	1,738	1,795	55	1,850	
July, .	•	•				1,681	59	1,740	1,766	47	1,813	
August,			•		.	1,729	61	1,790	1,708	53	1,761	
September,		•			.	1,776	61	1,837	1,652	55	1,707	
October,		•	•	•	.	1,827	61	1,888	1,743 •	55	1,798	
November,		•	•		.	1,838	60	1,898	1,770	56	1,826	
December,					.	1,848	59	1,907	1,782	51	1,883	

AWNINGS, SAILS, TENTS, ETC. [32 Establishments.]

				1					
January,				109	82	141	95	34	129
February,		•		98	30	128	99	85	134
March,				136	89	175	112	41	153
April, .				112	45	157	112	47	159
May, .				117	48	165	121	5 5	176
June, .				133	47	180	126	54	180
July, .				132	45	177	119	46	165
August,				108	86	144	118	37	150
September	, .			139	84	173	106	84	140
October,	•	•		149	29	178	109	36	145
November,				181	32	163	123	87	160
December,				118	31	149	107	85	142
•				l 1	1		1		

BICYCLES, TRICYCLES, ETC. [10 Establishments.]

January,				.	1,865	84	1,949	2,835	54	2,389
February,					2,082	95	2,127	2,541	64	2,605
March,				.	2,339	122	2,461	2,687	73	2,760
April, .				.	2,877	105	2,482	2,830	77	2,907
May, .				.	2,551	110	2,661	2,774	76	2,850
June, .		•			2,121	84	2,205	2,220	52	2,272
July, .				. 1	1,677	66	1,743	1,840	80	1,870
August,			•	.	1,442	50	1,492	1,003	41	1,044
September	, .			.	1,563	99	1,662	943	36	979
October,				.	1,670	78	1,748	1,163	38	1,201
November				.	1,773	72	1,845	1,503	84	1,537
December,					1,992	88	2,075	1,971	41	2,012

PERSONS EMPLOYED: BY INDUSTRIES—Continued.

AGGREGATES, BY MONTHS—1895, 1896—Continued.

BOOTS AND SHOES. [605 Establishments.]

						1895			1896	
	M	ONTHS	3.		Males	Females	Totals	Males	Females	Totals
January,					29,629	12,929	42,558	28,360	12,743	41,108
February,				.	29,741	12,873	42,614	29,565	13,366	42,931
March,				.	80,664	13,361	44,025	29,979	13,216	43,195
April, .				.	30,776	13,375	44,151	80,350	13,379	43,729
Мау, .					30,677	13,605	44,282	30,200	13,545	43,745
June, .				.	31,258	13,613	44,866	29,932	13,339	43,271
July, .		٠.		.]	30,589	13,112	43,701	28,979	12,699	41,678
August,				.	81,044	13,499	44,543	29,370	13,189	42,559
September	, .			.	30,217	13,125	43,342	29,327	13,196	42,528
October,				.	28,920	12,578	41,498	28,931	13,143	42,074
November	, .			.	28,460	12,391	40,851	27,371	12,366	89,737
December,					28,597	12,603	41,200	27,673	12,574	40,247

BOXES (PAPER AND WOODEN). [158 Establishments.]

				•	I	i i			
January,				2,047	1,694	3,741	2,095	1,691	3,786
February,			.	2,070	1,702	3,772	2,088	1,671	3,759
March,			.	2,086	1,738	3,824	2,109	1,673	3,782
April, .			.	2,142	1,733	3,875	2,113	1,672	3,785
May, .			.	2,142	1,748	3,890	2,133	1,671	3,804
June, .			.	2,086	1,724	3,810	2,081	1,658	8,739
July, .			.	1,978	1,670	3,648	1,972	1,597	3,569
August,			.	1,962	1,656	3,618	1,895	1,559	8,454
September			.	2,023	1,769	3,792	1,921	1,618	3,539
October,			.	2,118	1,835	3,953	2,023	1,668	3,691
November			.	2,118	1,797	3,915	2,059	1,641	3,700
December,			.	2,094	1,764	3,858	2,079	1,651	3,730
			- 1			· I			

BRICK, TILES, AND SEWER PIPE. [56 Establishments.]

					ï	11			
January,				451	5	456	468	5	478
February,				460	5	465	489	5	494
March,				492	5	497	507	5	512
April, .				1,117	5	1,122	1,294	5	1,299
May,				1,980	5	1,985	2,063	5	2,068
June.				2,022	5	2,027	2,147	5	2,152
July.				1,998	4	2,002	2,115	4	2,119
August,				1,891	4	1,895	2,077	4	2,081
September				1,817	4	1,821	1,853	4	1,857
October.	٠.			1,443	5	1,448	1,363	4	1,367
November				839	5	844	861	4	865
December	•			571	5	576	578	4	582
	•		•			l'		1	

STATISTICS OF MANUFACTURES. [Pub. Doc. 40

WWW.libtool.com.cn
PERSONS EMPLOYED: BY INDUSTRIES—Continued. AGGREGATES, BY MONTHS-1895, 1896-Continued. BROOMS, BRUSHES, AND MOPS. [19 Establishments.]

						1895			1896	
	Mo	ONTH	3.		Males	Females	Totals	Males	Females	Totals
January,					383	299	682	387	310	697
February,					392	808	700	395	326	721
March,				.	398	315	713	386	325	711
April, .					401	321	722	395	334	729
Мау, .				.	385	815	700	373	325	698
June, .				.	390	313	703	369	322	691
July, .				.	887	298	685	304	259	563
August,				.	373	295	668	343	277	620
September	, .			.	376	295	671	357	300	657
October,				.	389	307	696	394	324	718
November,				.	406	315	721	408	338	746
December,				.	417	311	728	428	350	778

BURIAL CASES, CASKETS, COFFINS, ETC. [7 Establishments.]

				1	- 1	i		1	
January,				179	19	198	179	20	199
February,				179	19	198	177	20	197
March,				184	19	203	178	20	198
April, .				180	19	199	178	20	198
May, .				183	19	202	177	20	197
June, .		•		186	19	205	178	20	198
July, .				179	17	196	178	20	198
August,				178	15	193	176	19	195
September,	, .			183	19	202	179	19	198
October,				187	20	207	179	19	198
November,				186	20	206	180	19	199
December,				188	20	208	180	19	199
						1		1	

BUTTONS AND DRESS TRIMMINGS. [15 Establishments.]

					1	- 1	ii ii			
January,					265	465	730	380	541	921
February,					286	460	746	358	503	861
March,					293	482	775	352	478	830
April, .		•			284	486	770	846	471	817
May, .				.]	272	492	764	331	465	796
June, .					280	485	765	338	438	776
July, .					277	461	738	317	412	729
August,					281	466	747	801	399	700
September	, .				285	467	752	284	411	695
October,					297	506	803	282	.414	696
November	, .				823	526	849	301	422	723
December,					299	482	781	328	427	755
				- 1	1		- 11		1	

WWW.libtool.com.cn
PERSONS EMPLOYED: BY INDUSTRIES—Continued. AGGREGATES, BY MONTHS - 1895, 1896 - Continued.

						1895			1896	
	M	HTMC	8.		Males	Females	Totals	Males	Females	Totals
January,					2,182	2,519	4,701	2,152	2,472	4,624
February,					2,184	2,491	4,675	2,174	2,362	4,536
March,					2,083	2,460	4,543	2,191	2,285	4,476
April, .					2,101	2,385	4,486	2,115	2,294	4,409
May, .					2,152	2,369	4,521	2,165	2,411	4,576
June, .				.	2,209	2,468	4,677	2,153	2,419	4,572
July, .				.	2,206	2,450	4,656	2,178	2,298	4,476
August,				.	2,251	2,416	4,667	2,073	2,088	4,161
September,					2,201	2,426	4,627	1,556	1,363	2,919
October,					2,235	2,400	4,635	1,891	1,793	3,684
November,					2,151	2,377	4,528	2,047	2,035	4,082
December,					2,238	2,438	4,676	2,126	2,163	4,289

				1.			l l		
January,				2,116	20	2,136	2,047	20	2,067
February,				2,206	22	2,228	2,116	22	2,138
March,			.	2,356	24	2,380	2,209	20	2,229
April, .			.	2,470	23	2,493	2,331	22	2,353
May, .				2,507	18	2,525	2,368	22	2,390
June, .				2,426	19	2,445	2,252	19	2,271
July, .			.	2,011	13	2,024	1,820	12	1,832
August,				1,936	10	1,946	1,686	11	1,697
September,	, .		.	1,906	11	1,917	1,599	8	1,607
October,			.	1,915	11	1,926	1,590	9	1,599
November,			.	1,936	9	1,945	1,626	10	1,636
December,			-	1,979	14	1,993	1,695	13	1,708
			- 1			11			

CEMENT.	KAOLIN.	LIME.	AND	PLASTER.	[10 Establishments.]
---------	---------	-------	-----	----------	----------------------

					l		I	l	
January,				108	-	108	109	-	109
February,				108	-	108	108	-	108
March,				118	-	118	98	_	98
April, .				126	-	126	118	-	118
May, .				128	-	123	125		125
June, .				127	-	127	127	-	127
July, .				122	-	122	126	_	126
August,				125	-	125	125	_	125
September				126	_	126	125	_	125
October,				124	_	124	180	_	130
November,	, -			123	-	123	128	_	128
December,				116	-	116	105	_	105
-					l	1 1	1	l	

STATISTICS OF MANUFACTURES. [Pub. Doc. 42

www.libtool.com.cn
PERSONS EMPLOYED: BY INDUSTRIES—Continued. AGGREGATES, BY MONTHS - 1895, 1896 - Continued.

CHEMICAL PREPARATIONS (COMPOUNDED). [12 Establishments.]

				1896						
	M	ONTHE	J.		Males	Females	Totals	· Males	Females	Totals
January,					344	2	346	342	2	344
February,				.]	343	2	845	338	1	339
March,				.]	349	2	351	337	1	338
April, .				.	338	2	340	831	2	333
Мау, .				. 1	327	2	329	342	2	344
June, .				.	343	2	345	841	8	344
July, .				.	353	2	355	314	3	817
August,					358	2	360	308	8	311
September	, .			. [351	2	353	806	3	309
October,	•			.	350	2	352	824	2 .	326
November				.	34 8	2	350	346	2	348
December,	-			.	340	2	342	342	2 .	344

CLOCKS,	WATCHES,	AND	JEWELRY.	[99	Establishr	nents.]
			-1	.1		

			- 1	ł		1	i i	1	
January,				2,486	1,189	3,675	2,426	1,173	3,599
February,			.	2,518	1,241	3,759	. 2,455	1,163	3,618
March,			.	2,407	1,197	3,604	2,352	1,126	3,478
April, .			٠.	2,194	1,047	3,241	2,213	1,029	3,242
May, .			.	2,177	1,049	3,226	2,172	992	3,164
T			.	2,309	1,224	3,533	2,199	1,035	3,234
July, .				2,306	1,248	3,554	2,059	988	3,047
A				2,194	1,200	3,394	1,923	930	2,853
September,				2,362	1,248	3,610	2,069	921	2,990
October,			.	2,493	1,256	3,749	2,191	95 <u>4</u>	3,145
November,			.	2,469	1,229	3,698	2,381	1,081	3,412
December,			.	2,476	1,159	3,635	2,455	1,077	3,532
			- 1					1	

CLOTHING.	Γ130	Establishments.

				- 1	ı	1		l	- 1	
January,					2,181	4,706	6,887	2,041	4,908	6,949
February,					2,256	4,979	7,235	2,083	5,226	7,309
March,					2,253	5,377	7,630	2,048	5,333	7,381
April, .				.	2,220	5,286	7,506	2,029	5,267	7,296
May, .	•			.	2,198	5,233	7,431	1,980	5,209	7,189
June, .				.	2,207	5,016	7,223	1,944	4,918	6,862
July, .				.	2,210	4,043	6,253	1,896	3,942	5,838
August,					2,278	4,406	6,684	1,951	4,263	6,214
September	, .				2,302	5,000	7,302	1,990	5,034	7,024
October,					2,368	5,865	7,733	2,009	5,263	7,272
November,	, .				2,375	5,159	7,534	2,008	5,018	7,026
December,		•	•	•	2,350	4,959	7,309	1,925	4,912	6,887
						, ,		lI	1	

No. 36.] PERSO www.libtool.com.cn

PERSONS EMPLOYED: BY INDUSTRIES - Continued. AGGREGATES, BY MONTHS - 1895, 1896 - Continued. COOKING, LIGHTING, AND HEATING APPARATUS. [35 Establighments.

					li	shments.]			
						1895			1896	
	MONTI	IS			Males	Females	Totals	Males	Females	Totals
January, .					1,187	4	1,191	1,857	4	1,361
February, .					1,169	5	1,174	1,403	5	1,408
March, .					1,885	5	1,390	1,463	5	1,468
April,					1,401	5	1,406	1,473	5	1,478
Мау,					1,437	5	1,442	1,503	5	1,508
June,					1,452	5	1,457	1,547	6	1,553
July,					1,300	5	1,305	1,463	6	1,469
August,					1,488	5	1,493	1,532	6	1,538
September,					1,645	5	1,650	1,634	7	1,641
October, .					1,663	5	1,668	1,716	7	1,728
November, .		·			1,613	5	1,618	1,662	6	1,668
December, .		•			1,585	5	1,590	1,611	6	1,617
January,			AGI		1,179	1,019	2,198	blishmer	1,104	2,501
-	:	:	•		1,150	1,039	2,189	1,407	1,168	2,575
March,	•	•	:		1,176	1,066	2,242	1,626	1,203	2,829
April, .		-	:		1,202	1,118	2,320	1,652	1,236	2,888
May,	•	•	•	:	1,238	1,123	2,361	1,688	1,186	2,874
June, .		•		:	1,231	1,049	2,280	1,657	1,173	2,830
July, .		•	•	:	1,229	1,063	2,292	1,598	1,056	2,654
August,		:	:	:	1,439	1,139	2,578	1,146	984	2,130
September,		•	:		1,487	1,128	2,615	1,037	958	1,995
October,	•	•	:		1,490	1,128	2,618	1,030	977	2,007
November,	•	•	•		1,408	1,086	2,494	1,172	996	2,168
December,		-		Ī	1,210	987	2,197	1,174	976	2,150
	co	RKS,	в	IN	GS, AN	D TAPS	. [3 Es	tablishm	ents.]	1
January,		•			84	8	87	25	4	29
February,		•	•	•	84	8.	37	23	1	24
March,		•		•	88	3	86	88	12	45
April, .				•	84	8	37	82	12	44
May, .		•			85	8	88	82	12	44
June, .					85	4	39	86	12	48
July, .		•			84	4	38	85	12	47
August,					84	4	38	85	12	47
September,					84	8	87	85	12	47
October,					82	-	32	83	18	46
November,					81	-	31	84	14	48
December,					31	-	81	84	15	49
•					1	1	l	H	1	1

44 STATISTICS OF MANUFACTURES. [Pub. Doc. www.libtool.com.cn

PERSONS EMPLOYED: BY INDUSTRIES—Continued.

AGGREGATES, BY MONTHS—1895, 1896—Continued.

COTTON GOODS. [169 Establishments.]

					1895		1896			
N	IONTH	8.		Males	Females	Totals	Males	Females	Totals	
January, .				39,197	40,820	80,017	40,823	41,182	82,005	
February, .			.	89,246	40,827	80,073	40,864	41,195	82,059	
March, .			.	39,550	40,863	80,413	40,909	41,291	82,200	
April,			.	39,363	40,938	80,301	40,346	40,644	80,990	
Мау,				39,282	41,019	80,301	39,964	40,359	80,323	
June,			.	39,389	40,697	80,086	39,586	39,769	79,355	
July,				38,619	39,713	78,332	37,592	37,094	74,686	
August, .				38,288	39,462	77,750	33,670	83,026	66,696	
September, .				39,178	40,244	79,422	35,736	35,519	71,255	
October, .				39,124	40,293	79,417	38,921	39,020	77,941	
November, .				39,761	40,953	80,714	39,567	39,663	79,230	
December, .				39,785	40,986	80,771	40,332	40,559	80,891	

COTTON, WOOLLEN, AND OTHER TEXTILES. [2 Establishments.]

•		. !	750	225	11			
		- 1	100	865	1,615	828	805	1,633
•	•		757	872	1,629	871	865	1,736
		.	782	905	1,687	887	900	1,787
		.	782	900	1,682	907	896	1,803
		.	774	902	1,676	895	877	1,772
			762	883	1,645	875	886	1,761
		.	742	873	1,615	883	873	1,756
		.	740	880	1,620	905	894	1,799
		.	755	860	1,615	906	923	1,829
			769	857	1,626	960	978	1,938
			665	1,012	1,677	833	837	1,670
			761	880	1,641	834	834	1,668
	•							

CRAYONS, PENCILS, CRUCIBLES, ETC. [4 Establishments.]

							1	1	
January,				17	23	40	21	15	36
February,				19	23	42	21	15	36
March,			•	22	23	45	21	15	36
April, .				22	24	46	21	15	36
May, .				21	24	45	20	15	35
June, .				21	24	45	19	15	84
July, .				22	24	46	18	15	33
August,				18	24	42	17	15	32
September				18	24	42	20	15	85
October.	•			18	16	84	21	15	36
November.				16	16	32	21	15	36
December,				16	16	32	21	15	36
•				1	1	1		1	

No. 36.] PERSONS EMPLOYED. www.libtool.com.cn

PERSONS EMPLOYED: BY INDUSTRIES—Continued. AGGREGATES, BY MONTHS—1895, 1896—Continued. DRUGS AND MEDICINES. [27 Establishments.]

		auus	AND	MEDI	CINES.	[27 ESU	ibiishmei	uts.]	
					1895			1896	
	Monte	is.		Males	Females	Totals	Males	Females	Totals
January,				296	230	526	800	227	527
- ·				306	242	548	304	250	554
March,				323	261	584	326	248	574
April, .				403	300	703	405	289	694
May,		•		369	281	650	367	269	636
June, .				369	266	635	363	254	617
P 1		-		294	229	523	299	217	516
				341	192	533	354	190	544
September,		-		420	343	763	407	305	712
October,				432	877	809	408	852	760
November,				419	370	789	420	323	748
December,				385	861	746	381	292	678
			!		<u> </u>	l	1	1	
			DYES	TUFFS	. [8 Es	ta blishme	ents.]		
									
January, .				140	11	151	124	10	134
February,				123	15	138	124	• 13	137
March,				139	17	156	107	18	120
April,		•		135	17	152	106	13	119
Мау, .		•		137	17	154	116	13	129
June, .		•		133	16	149	91	14	100
July, .	• •	•		133	16	149	125	14	189
August,		•		138	16	154	108	12	120
September,		•		140	15	155	77	17	94
October, .		•		143	15	158	109	17	126
November, .		•		143	14	157	113	20	13
December,	• •	• .	$\cdot \cdot $	139	14	158	120	25	148
					,				
EART	HEN	, PLA	STER	, AND	STONE	WARE.	[7 Es	tablishme	ents.]
January, .				159	13	172	131	12	145
February,				200	15	215	129	12	14
March,			1	163	13	176	136	12	14
April, .				178	17	195	198	13	21
		·		255	17	272	220	15	23
June,		•		239	17	256	236	15	25
July,		:		247	18	265	232	25	25
August,		:		266	21	287	246	25	27
September,	•			228	19	247	248	25	273
		•	1	224	21	245	181	25	206
Jotober, . November, .		•		201	22	223	200	25 25	22
		•			15	223		25 17	157
December, .	•	•	•	191	10	200	140	14	10/

PERSONS EMPLOYED: BY INDUSTRIES—Continued.

AGGREGATES, BY MONTHS—1895, 1896—Continued.

ELECTRICAL APPARATUS AND APPLIANCES. [23 Establishments.]

						1895			1896	
	M	ONTH	8.		Males	Females	Totals	Males	Females	Totals
January,					2,587	385	2,972	2,320	875	2,695
February,				.	2,548	383	2,926	2,347	371	2,718
March,					2,525	374	2,899	2,446	345	2,791
April, .					2,496	400	2,896	2,370	847	2,717
Мау, .		•		.	2,672	417	3,089	2,456	339	2,795
June, .		•			2,675	431	3,106	2,485	341	2,826
July, .				.	2,700	435	3,185	2,464	844	2,808
August,				.	2,604	424	3,028	2,436	339	2,775
September	, .			.	2,505	380	2,885	2,265	336	2,601
October,		•			2,368	385	2,753	2,203	321	2,524
November,				.	2,372	375	2,747	2,261	348	2,609
December,				.	2,399	368	2,767	2,275	329	2,604

		EL	EC	rr	OPLATING.	[1	2 Establi	shments.]		
January,					83	6	89	130	4	134
February,		٠.			89	6	95	127	4	131
March,			•		116	7	123	130	4	134
April, .					122	7	129	155	4	159
May, .					121	7	128	163	4	167
June, .					114	7	121	139	4	143
July, .					107	7	114	122	4	126
August,					99	7	106	104	4	108
September,					111	7	118	94 .	4	98
October,					119	7	126	100	4	104
November,					130	7	137	106	4	110
December,					136	7	143	106	4	110

EMERY	AND	SAND	PA	PER ANI	CLO'	TH, ETC.	[10 Es	tablish	nents.]
January,				272	8	275	314	2	816
February,				267	3	270	328	2	330
March,				265	3	268	852	2	354
April, .				258	3	261	371	2	373
May, .				263	8	266	853	2	. 855
June, .			.	262	3	265	342	2	344
July, .				266	8	269	833	2	835
August,			.	274	3	277	808	2	310
September	,			280	3	283	303	2	305
October,				280	3	283	285	2	287
November,	,			297	3	300	304	2	306
December,				304	3	807	314	. 2	316
						!		<u></u>	

PERSONS EMPLOYED: BY INDUSTRIES—Continued. AGGREGATES, BY MONTHS—1895, 1896—Continued.

FANCY ARTICLES, ETC. [11 Establishments.]

	F.	INCY	AR	TICLES	ETC.	[11 Esta	blishmer	nts.]	
					1895			1896	
M	ONTH	9.		Males	Females	Totals	Males	Females	Totals
January, .				85	209	294	108	206	314
February, .				73	152	225	82	162	244
March, .				71	111	182	78	124	202
April,				68	104	172	74	100	174
Мау,		•		65	101	166	78	109	182
June,	•	•		66	115	181	71	104	175
July,				68	138	206	78	106	184
August, .				76	153	229	86	112	198
September, .				82	169	251	92	145	237
October, .				88	196	284	100	178	278
November, .				108	221	329	111	184	295
December, .	•		•	104	230	834	103	219	322
		F	ERT	ILIZER	8. [3 E	stablish:	11	1	
January, .	•	•	•	40	-	49	50	-	50
February, .	•	•	•	50	-	50	50	-	50
Karch, .	•	•	•	50	-	50	50	-	50
April,	•	•	•	50	-	50	51	-	51
May,	•	•	•	49	-	49	50	-	50
June,	•	•	-	50	-	50	49	-	44
July,	•	•		49 48	-	49	49	_	44
August, .	•	•		48	-	48	11		45
September, .	•	•		50	-	50	49 53	-	40 52
October, .	•	•		49	-	1	53	-	52 52
November, . December, .	•	•		40	_	49	53		52
			•				<u> </u>		
, F	INE	ART	S A	ND TAX	KIDERM	Y. [3]	Establish	ments.]	
anuary, .		1		۰	1	10	14	1	1:
	•	•	•	9	1	10	14	1	1
february, . farch, .	•	•		9	1	10	15	1	10
'	•	•		9	1	10	13	1	1
• .	•	•		9	1	10	14	1	1
fay,	• •	•			1	10	13	1	1.
une,	•	•		9	1 1	10	13	1	1
fuly,	•	•		9	1	1		1	1
August, .	•	•	• •	, ,	1	10	13	1	

1 ;

PERSONS EMPLOYED: BY INDUSTRIES—Continued.

AGGREGATES, BY MONTHS—1895, 1896—Continued.

FIREWORKS AND MATCHES. [4 Establishments.]

						1895			1896	
	M	ONTH	8.		Males	Females	Totals	Males	Females	Totals
January,		•			62	39	101	52	41	93
February,				.	66	37	103	56	38	94
March,				.	65	36	101	58	42	100
April, .					67	88	105	70	44	114
Мау, .					64	39	103	63	42	108
June, .					73	37	110	68	39	107
July, .				.	44	27	71	58	40	98
August,					40	12	52	46	25	71
September	, .				35	14	49	51	81	82
October,					35	18	53	54	23	77
November,					41	19	60	61	80	91
December,					54	83	87	65	80	98

FLAX, HEMP, JUTE, AND LINEN GOODS. [10 Establishments.]

		- 1			- 1		1	
			1,173	1,082	2,255	1,160	1,146	2,306
		.	1,160	1,089	2,249	1,152	1,161	2,313
		.	1,167	1,082	2,249	1,171	1,144	2,315
		.	1,181	1,107	2,288	1,185	1,187	2,372
		.	1,184	1,084	2,268	1,170	1,179	2,349
			1,182	1,095	2,277	1,185	1,188	2,373
			1,283	1,034	2,317	1,213	1,181	2,394
			1,281	1,008	2,289	1,216	1,157	2,373
		.	1,282	1,037	2,319	989	1,109	2,098
		.	1,179	1,049	2,228	843	1,086	1,929
			1,173	1,049	2,222	1,049	1,107	2;156
		.	1,157	1,045	2,202	1,076	1,140	2,216

FOOD PREPARATIONS. [319 Establishments.]

			1				· ·	!	
January,				5,389	1,698	7,087	5,082	1,768	6,850
February,			.	5,272	1,707	6,979	5,102	1,824	6,926
March,			.	4,676	1,817	6,493	4,625	1,870	6,495
April, .			.	4,557	1,783	6,340	4,576	1,869	6,445
May, .			.	4,574	1,778	6,352	4,767	1,839	6,606
June, .				4,681	1,788	6,469	4,876	1,846	6,722
July, .			.	4,834	1,840	6,674	4,912	1,842	6,754
August,				4,708	1,768	6,476	4,834	1,768	6,602
September,			.	4,803	2,038	6,841	4,921	1,981	6,902
October,			.]	4,957	2,188	7,145	5,027	2,221	7,248
November,			.	5,038	2,349	7,387	5,103	2,293	7,396
December,				4,924	2,192	7,116	5,059	2,178	7,232

PERSONS EMPLOYED: BY INDUSTRIES—Continued. AGGREGATES, BY MONTHS—1895, 1896—Continued.

FURNITURE. [119 Establishments.]

							1895		!	1896	
	M	ONTH	8.	_		Males	Females	Totals	Males	Females	Totals
January,						2,916	808	8,219	2,922	275	3,197
February,						2,998	816	8,814	8,016	823	3,880
March,						3,099	848	3,442	8,151	828	8,479
April, .					.	8,082	358	8,440	3,167	335	8,502
May, .					.	3,165	870	3,585	8,150	864	8,514
June, .					.	8,100	368	8,468	8,014	879	3,398
July, .						8,021	332	8,353	2,642	291	2,988
August,					.	3,021	848	8,369	2,692	841	8,033
September,					.]	3,238	858	3,591	2,809	848	8,157
October,					.	3,508	407	3,915	2,962	367	8,829
November,						8,538	407	3,940	2,972	366	8,838
December,						3,289	363	3,652	2,922	820	8,242

GLASS. [14 Establishments.]

				- 1	1		1		1	
January,					811	21	832	811	17	828
February,				.	307	22	829	858	16	874
March,				.	309	22	331	349	17	366
April, .				.	299	22	821	808	16	319
May, .				.	294	22	316	299	15	814
June, .				.	293	22	815	283	11	294
July, .		• .		.	261	18	279	232	11	248
August,					839	23	362	289	12	301
September	•				857	23	880	206	7	218
October,					361	23	884	208	8	216
November					872	23	895	289	15	804
December				.	879	23	402	299	16	315
						į.	ľ		Į Į	

GLUE, ISINGLASS, AND STARCH. [23 Establishments.]

					1	11		1	
January,				441	58	499	525	67	592
February,				451	58	509	522	59	581
March,				844	43	387	454	62	516
April, .				821	43	364	354	50	404
May, .				810	44	854	846	51	397
June, .				242	28	270	295	51	346
July, .				190	24	214	207	84	241
August,				, 181	20	201	190	19	209
September	, .	•		199	21	220	221	21	242
October,				288	26	814	307	83	340
November	, .			817	39	356	848	44	887
December,		•		894	59	458	440	57	497 -
-					ļ	- 11		- 1	

PERSONS EMPLOYED: BY INDUSTRIES—Continued.

AGGREGATES, BY MONTHS—1895, 1896—Continued.

HAIR WORK (ANIMAL AND HUMAN). [7 Establishments.]

							1895			1896	
	M	ONTH	8.			Males	Females	Totals	Males	Females	Totals
January,			•	•		75	74	149	68	76	144
February,						75	70	145	70	76	146
March,						. 75	85	160	70	82	152
April, .					.	74	88	162	71	82	153
May, .					.	74	76	150	72	82	154
June, .		•				76	73	149	74	77	151
July, .					.	77	72	149	74	79	153
August,				•	- 1	72	72	144	74	71	145
September	, .					74	71	145	71	69	140
October,					.	78	72	145	69	64	133
November,					.	78	76	149	69	65	134
December,					.	74	72	146	70	66	136

HOSE: RUBBER, LINEN, ETC. [4 Establishments.]

	_								
	•	•	•	876	58	434	750	242	992
			.	451	72	523	784	224	1,008
				519	76	595	862	315	1,177
			- 1	524	82	606	609	301	910
			.	518	98	616	695	443	1,138
				468	89	557	514	169	683
				819	58	877	455	108	563
				802	44	346	874	75	449
			•	299	58	352	384	78	462
				878	75	458	891	77	468
				585	105	640	430	89	519
:			.	779	110	889	464	102	566

HOSIERY AND KNIT GOODS. [42 Establishments.]

_					- 1						
January,	•	•	•	•	•	1,810	8,575	5,885	1,881	4,115	5,996
February,						1,794	8,611	5,405	1,867	4,050	5,917
March,					.	1,807	3,598	5,405	1,846	4,088	5,929
April, .						1,887	3,564	5,451	1,741	4,022	5,763
May, .					.	1,881	8,594	5,475	1,773	4,022	5,795
June, .						1,897	3,678	5,570	1,725	3,893	5,618
July, .					.	1,878	3,493	5,371	1,642	8,755	5,397
August,						1,959	3,653	5,612	1,557	3,422	4,979
September	, .					1,928	3,731	5,659	1,690	8,812	5,002
October,		. •			.	1,967	3,965	5,932	1,770	8,831	5,601
November,	, .					1,982	4,083	6,065	1,830	8,964	5,794
December,						1,952	3,964	5,916	1,795	8,889	5,684
							.,	,			

PERSONS EMPLOYED: BY INDUSTRIES - Continued. AGGREGATES, BY MONTHS - 1895, 1896 - Continued.

INK, MUCILAGE, AND PASTE. [7 Establishments.]

							1895			1896	
	M	ONTES	١.			Males	Females	Totals	Males	Females	Totals
January,			•			81	19	50	32	20	52
February,					.	36	19	56	87	20	57
March,					.	42	24	66	48	25	68
April, .						42	24	66	48	24	67
May, .					.	43	21	64	44	21	66
June, .				. `	.	36	21	57	87	21	58
July, .					.	40	21	61	87	19	56
August,					.]	41	22	68	86	18	54
September			•			47	84	81	41	21	62
October,					.	42	54	96	87	24	61
November,					.]	38	21	59	87	21	58
December,					.	82	20	52	32	19	51

IVORY, BONE, SHELL, AND HORN GOODS, ETC. [18 Establishments.]

•						- 11			
•	•				400	007		744	
		•	•	781	154	885	667	146	818
•	•	•		798	156	949	684	145	829
				822	168	990	678	162	840
			.	748	168	911	589	177	766
				648	158	796	550	171	721
			.	591	145	786	625	159	684
			.	568	126	689	499	188	687
			- 1	560	131	691	488	106	598
		•		604	141	745	497	108	606
				672	151	823	501	112	618
			-	596	118	714	518	117	680
		•	.	685	141	776	545	111	656

LEATHER. [148 Establishments.]

January,		•			6,637	278	6,910	6,489	292	6,781
February,				.	6,647	271	6,918	6,432	278	6,710
March,				.	6,546	266	6,812	6,264	256	6,520
April, .					6,655	269	6,924	6,220	262	6,482
May, .				.	6,859	271	7,130	6,167	261	6,428
June, .				.	7,099	268	7,367	6,126	246	6,372
July, .					7,170	259	7,429	6,081	288	6,264
August,					7,351	258	7,609	5,999	247	6,246
September	, .			-	7,393	282	7,675	5,696	260	5,956
October,					7,007	287	7,294	5,547	254	5,801
November,					6,674	292	6,966	5,878	264	6,187
December,				.]	6,608	292	6,895	6,100	281	6,881

PERSONS EMPLOYED: BY INDUSTRIES—Continued.

AGGREGATES, BY MONTHS—1895, 1896—Continued.

LIQUORS AND BEVERAGES (NOT SPIRITUOUS). [28 Establishments.]

					- 1		1895			1896	
•	Montes.						Females	Totals	Males	Females	Totals
January,						136	1	137	131	-	131
February,			•			137	1	138	133	-	133
March,			. •		.	144	2	146	140	1 1	141
April, .						164	3	167	164	2	166
May, .					.	211	8	214	[,] 196	8	199
June, .						252	8	255	214	8	217
July, .					.	258	4	262	235	3	238
August,						249	4	253	228	8	231
September	, .				.	219	2	221	196	-	196
October,			٠.			185	2	187	155	-	15
November,						159	2	161	142	l l	149
December,					.	142	2	144	133	-	133

LIQUORS: MALT, DISTILLED, AND FERMENTED. [57 Establishments.]

				- 1		i I	- 1	1 - 1		
January,					1,432	2	1,434	1,519	8	1,522
February,				.	1,392	4	1,396	1,561	4	1,565
March,					1,465	4	1,469	1,527	4	1,531
April, .				.	1,482	4	1,486	1,586	4	1,590
May, .		•		.	1,580	4	1,584	1,711	6	1,717
June, .					1,715	4	1,719	1,728	6	1,784
July, .				.	1,744	4	1,748	1,796	6	1,802
August,				.	1,775	4	1,779	1,842	6	1,848
September	, .		•		1,728	4	1,782	1,751	5	1,756
October,					1,682	4	1,686	1,757	4	1,761
November	, .				1,672	3	1,675	1,656	4	1,660
December,	•				1,606	8	1,609	1,684	4	1,638
				1			1			

LUMBER.	Lao	Establishments.	•
LUMBER.	132	Katabuanmenta.	

						1		1	i		
January,	•	•		•		686	5	691	651	8	. 659
February,						680	5	635	644	8	652
March,						646	5	651	622	9	631
April, .						843	11	854	798	11	. 809
May, .						835	11	846	855	12	867
June, .						761	11	772	759	12	771
July, .						720	11	731	664	11	675
August,						783	11	744	. 638	9	647
September	, .					748	12	760	742	11	758
October,						779	12	791	750	10	760
November,						832	12	844	760	11	771
December,	•	•	•	•	٠	862	12	874	749	11	760

No. 36.] PERSON WWW.libtool.com.cn

PERSONS EMPLOYED: BY INDUSTRIES - Continued. AGGREGATES, BY MONTHS - 1895, 1896 - Continued. MACHINES AND MACHINERY. [371 Establishments.]

							1895			1896	
	Months.						Females	Totals	Males	Females	Totals
January,						15,163	326	15,489	18,772	412	19,184
February,					.	15,184	' 325	15,509	18,788	386	19,174
March,						15,159	293	15,452	18,810 .	397	19,207
April, .					.	14,653	316	14,969	17,845	. 384	18,229
Мау, .						15,425	328	15,753	17,817 .	810	18,127
June, .					-	16,156	317	16,478	17,572	322	17,894
July, .					.	16,841	810	17,151	17,480	. 808	17,788
August,			٠.			17,461	811	17,772	17,217	300	17,517
September.	, .				.	18,043	331	18,374	16,868	. 301	17,169
October,					.	18,268	344	18,612	17,094	328	17,422
November,					.	18,381	381	18,762	- 17,029	836	17,365
December,					.	18,247	400	18,647	17,124	854	17,478

METALS AND METALLIC GOODS. [382 Establishments.]

January,	•	•			12,602	1,427	14,029	13,187	1,578	14,765
February,					12,507	1,455	13,962	13,222	1,562	14,784
March,					12,573	1,561	14,134	13,016	1,574	14,590
April, .					12,628	1,592	14,220	12,969	1,546	14,515
Мау, .					12,963	1,585	14,548	13,045	1,539	14,584
June, .				.	13,042	1,562	14,604	12,806	1,461	14,267
July, .					12,473	1,475	13,948	12,159	1,442	13,601
August,					13,205	1,529	14,784	12,189	1,332	13,521
September					13,582	1,541	15,123	12,267	1,365	13,632
October,		• •	٠.		14,039	1,666	15,705	12,595	1,420	14,015
November					13,986	1,663	15,649	12,706	1,465	14,171
December.					13,817	1,689	15,506	12,527	1,463	13,990

MIXED TEXTILES. [12 Establishments.]

					- 1	ľ					
January,					.]	475	158	628	526	219	745
February,					.	452	179	631	544	230	774
March,					.	497	196	693	546	230	776
April, .						488	182	670	585 .	225	760
May, .						589	193	732	511 .	. 213	724
June, .						512	197	709	.468 .	. 214	. 677 .
July, .						540	204	744	.438 .	220	658 .
August,						508	211	719	816	134	450 .
September	, .					542	208	745	.417 .	163	580
October,						570	218	788	482 .	. 154	586
November	, .					544	229	778	. 450 .	178	623
December	•	•	•	•		548	214	757	460 .	. 197	657
									!I		

54 STATISTICS OF MANUFACTURES. www.libtool.com.cn [Pub. Doc.

PERSONS EMPLOYED: BY INDUSTRIES - Continued. AGGREGATES, BY MONTHS - 1895, 1896 - Continued.

							1895		1896			
	Mo	NTH).			Males	Females	Totals	Males	Females	Totals	
January,						469	1	470	487	1	438	
February,					.	471	1	472	464	1	465	
March,					.	465	1	466	478	1	479	
April, .					.	458	1	454	479	1	480	
May, .			•		.	446	1	447	457	-	457	
June, .					.	441	1	442	436	8	439	
July, .					.	419	1	420	425	8	428	
August,					.	419	1	420	429	1 1	430	
September,					.	407	1	408	413	1	414	
October,					.	394	1	395	416	1 1	417	
November,					.	382	1	383	431	2	433	
December,						390	1	391	429	4	433	
MUSIC	AL	IN	18T	RU	ME	NTS AN	D MAT	ERIALS	. [65 E	stablishn	ents.]	
MUSIC	AL	IN	ST.	RU	ME	NTS AN	102 MAT	ERIALS	. [65 E	stablishn	nents.]	
		IN :	ist :	RU	ME							
January, February,			·	RUI		2,116	102	2,218	2,031	99	2,130	
January, February, March,			· · · · · · · · · · · · · · · · · · ·	RU		2,116 2,128	102 101	2,218 2,229	2,031 2,035	99 100	2,130 2,135	
January, February, March, April, .			: :	•		2,116 2,128 2,086	102 101 106	2,218 2,229 2,192	2,031 2,035 2,053	99 100 98	2,130 2,130 2,151	
January,		:	· · · · · · · · · · · · · · · · · · ·	:	•	2,116 2,128 2,086 2,097	102 101 106 106	2,218 2,229 2,192 2,203	2,031 2,035 2,053 2,039	99 100 98 100	2,130 2,130 2,151 2,130	
January, February, March, April, .			:	:	•	2,116 2,128 2,086 2,097 2,037	102 101 106 106 105	2,218 2,229 2,192 2,203 2,142	2,031 2,035 2,053 2,039 1,949	99 100 98 100 99	2,130 2,136 2,151 2,130 2,046	

•		•		2,116	102	2,218	2,031	99	2,130
			.	2,128	101	2,229	2,035	100	2,135
			.	2,086	106	2,192	2,053	98	2,151
			.	2,097	106	2,203	2,039	100	2,139
				2,037	105	2,142	1,949	99	2,048
			.	2,023	105	2,128	1,502	60	1,562
			.	2,039	102	2,141	1,395	51	1,446
			.	2,035	109	2,144	1,379	50	1,429
				2,213	111	2,324	1,459	54	1,513
			.	2,212	125	2,337	1,759	· 84	1,843
			.	2,269	127	2,396	1,851	88	1,939
•	•	•		2,265	128	2,393	1,871	91	1,962

•	A	ND	IL	LU:	MINATI	IG FLU	[9 Establishments.]					
January							79	33	112	97	69	166
Februar	у,						78	88	111	96	69	165
March,							75	13	88	94	69	163
April, .							74	13	87	88	9	92
May, .							71	13	84	75	9	84
June, .							72	13	85	76	9	85
July, .							74	13	87	76	9	85
August,							74	18	· 87	75	9	84
Septemb	er,						75	13	88	79	9	88
October,	, '						82	13	95	89	9 1	98
Novemb	er,						86	13	99	98	9	102
Decemb	er,	•	•	•	•	•	88	88	121	94	9	103

WWW.libtool.com.cn
PERSONS EMPLOYED: BY INDUSTRIES—Continued. AGGREGATES, BY MONTHS-1895, 1896-Continued.

							1895*		1896			
•	Me	ONTH	8.			Males	Females	Totals	Males	Females	Totals	
January,						204	16	220	180	8	188	
February,						210	22	232	179	8	187	
March,						219	23	242	180	10	190	
April, .					.	222	20	242	177	11	188	
Мау, .						228	20	248	179	11	190	
June, .				•	.	219	20	239	213	17	230	
July, .						220	17	237	203	12	215	
August,					.	196	11	207	188	13	201	
September,	, .		•			218	15	233	191	16	207	
October,						224	15	239	202	16	218	
November,						217	16	233	205	17	222	
December,						207	17	224	172	11	183	

PAPER AND PAPER GOODS. [128 Establishments.]

					1		1			
January,					6,322	5,405	11,727	6,381	5,281	11,662
February,			•		6,249	5,453	11,702	6,347	5,178	11,525
March,					6,274	5,489	11,763	6,301	5,127	11,428
April, .					6,330	5,450	11,780	6,333	5,133	11,466
May, .					6,328	5,425	11,753	6,238	5,042	11,280
June, .					6,312	5,359	11,671	6,191	5,014	11,205
July, .					6,108	5,162	11,270	5,968	4,610	10,578
August,				. 1	6,135	5,126	11,261	5,935	4,427	10,862
September	, .				6,210	5,267	11,477	5,918	4,675	10,593
October,	•				6,401	5,446	11,847	6,015	4,868	10,883
November	, .				6,478	5,435	11,913	6,109	5,025	11,134
December,					6,881	5,204	11,585	6,216	5,035	11,251
				- 1						1

PERFUMES.	TOILET	ARTICLES.	ETC.	[4 Establishments.]

T								32		.,	24
January,	•	•	•	•	•	15	17	32	13	11	24
February,		•		•		15	15	80	13	11	24
March,	•	•				15	16	31	18	18	26
April, .						13	17	30	13	12	25
May, .		•				14	19	83	- 12	13	25
June, .						18	19	32	12	12	24
July, .						18	18	31	13	11	24
August,						8	5	18	13	11	24
September	, .					12	14	26	13	18	26
October,						18	15	28	13	14	27
November,						13	14	27	18	14	27
December,						13	21	84	13	14	27
							1	1			

56 STATISTICS OF MANUFACTURES. [Pub. Doc.

www.libtool.com.cn

PERSONS EMPLOYED: BY INDUSTRIES - Continued.

AGGREGATES, BY MONTHS - 1895, 1896 - Continued.

PHOTOGRAPHS AND PHOTOGRAPHIC MATERIALS. [24 Establishments.]

						1895	Ì		1896	
;	MONTH	3.			Males	Females	Totals	Males	Females	Totals
January, .					258	150	408	295	169	464
February,					254	157	411	313	199	519
March, .					264	175	439	311	212	. 52
April,					265	180	445	327	214	• 541
May,					264	167	431	830	210	540
June,					285	178	463	841	201	. 54
July,					279	178	457	800	200	50
August,					284	207	491	228	189	41
eptember,		-			292	236	528	268	161 ·	42
October,			•		298	247	545	298	202	50
November,					330	252	582	833	211 ·	54
December,			•		318	244	562	344	251	59
	POI	ısı	HES	A :	ND DRI	ESSING.	[33 Es	stablishm	ents.]	
January,					158	101	259	- 155	115	27
February,					162	108	270	154	125	27
March,					164	147	311	161	154	31
April, .					169	165	334	158	171	82
May, .					170	167	337	155	172	32
• •					171	165	336	150	167	31
					178	129	307	146	131	27
					150	78	228	146	136	28
					164	165	329	146	198	34
					171	163	334	145	188	33
•					173	129	302	146	146	29
•					173	117	290	142	121	26
June,					171 178 150 164 171	165 129 78 165 163	336 307 228 329 334	150 146 146 146	167 131 136 198	3 2 2 3 3
PRINTIN	IG, P	UB:	LISI	II		İ		1		
January,		•	•	•	1,707	886	2,593	1,708	904.	2,61
February,		•	•	•	1,744	818	2,562	1,726	876	2,60
March,	•	٠	•	•	1,785	809	2,594	1,788	883	2,62
April, .	•	•	•	٠	1,754	802	2,556	1,733	852	2,58
May, .		٠	•	•	1,738	811	2,549	1,693	817	2,51
June, .		•	•	•	1,697	826	2,523	1,739	838	. 2,57
July, .			•	•	1,713	858	2,571	1,739	825.	2,56
August,					1,705	813	2,518	1,697	783.	2,48
September,					1,718	834	2,552	1,720	821	2,54
October,					1,719	885	2,604	1,727	889	2,56
November,					1,735	899	0.004	11	839	0.00
dosemper,				•	1,100	099	2,634	1,728	- 639	2,56

PERSONS EMPLOYED: BY INDUSTRIES—Continued.

AGGREGATES, BY MONTHS—1895, 1896—Continued.

PRINT WORKS, DYE WORKS, AND BLEACHERIES. [47 Establishments.]

						1895		1896			
	M.	ONTH	3.		Males	Females	Totals	Males	Females	Totals	
January,					5,033	1,243	6,276	5,165	1,258	6,423	
February,				.	5,041	1,241	6,282	5,157	1,253	6,410	
March,				.	5,110	1,269	6,379	5,129	1,226	6,355	
April, .				.	5,124	1,273	6,397	5,004	1,223	6,227	
Мау, .				.	5,144	1,266	6,410	4,820	1,193	6,013	
June, .				.	5,254	1,240	6,494	4,591	1,183	5,774	
July, .				.	5,328	1,216	6,544	4,867	1,197	6,064	
August,				.	5,332	1,195	6,527	4,979	1,191	6,170	
September	, .			. [5,317	1,212	6,529	5,023	1,198	6,221	
October,					5,339	1,219	6,558	5,270	1,243	6,513	
November,					5,247	1,262	6,509	5,280	1,307	6,587	
December,					5,241	1,260	6,501	5,425	1,378	6,803	

RAILRO	AD	C	ONS	TR	UC	TION AN	D EQU	IPMEN	T. [16 F	Establish	ments.]
January,						2,287	-	2,287	3,009	_	3,009
February,						2,311	-	2,311	3,000	-	3,000
March,						2,337	-	2,337	2,988	-	2,988
April, .						2,434	-	2,434	2,943	-	2,943
May, .						2,449	- 1	2,449	2,909	-	2,909
June, .						2,525	-	2,525	2,970	-	2,970
July, .						2,505	-	2,505	2,936	- '	2,936
August,						2,468	- 1	2,468	2,824	_'	2,824
September	, .					2,464	-	2,464	2,807	-	2,807
October,						2,468	-	2,468	2,803	_	2,803
November	, .					2,587	-	2,587	2,609		2,609
December,						2,653	-	2,653	2,691	-	2,691

	RI	J B B	ER	AN	D.	ELASTIC	GOOD	S. [41	Establish	ments.]	
January,						4,558	3,532	8,090	4,815	3,591.	8,406
February,						3,975	3,596	7,571	4,196	3,417	7,613
March,						4,258	3,616	7,874	4,265	8,394.	7,659
April, .						4,365	8,372	7,737	4,072	2,633.	- 6,705
May, .						4,849	3,404	8,253	4,785	3,387.	. 8,172
June, .						4,958	8,607	8,565	4,824	3,423	8,247
July, .						5,032	3,676	8,708	4,792	3,380	8,172
August,						5,159	3,774	8,933	4,705	3,331	8,036
September						5,000	3,901	8,901	4,673	3,439	8,112
October.	٠.					4,296	3,932	8,228	4,615	3,676.	8,291
November						5,171	8,772	8,943	4,679	3,748.	8,427
December						5,150	8,745	8,895	4,671	8,711.	8,382

PERSONS EMPLOYED: BY INDUSTRIES—Continued.

AGGREGATES, BY MONTHS—1895, 1896—Continued.

SADDLERY AND HARNESS. [41 Establishments.]

				Ì		1895			1596	
	M	ONTH	3.		Males	Females	Totals	Males	Females	Totals
January,					328	75	403	298	76	874
February,					322	78	400	277	77	854
March,					333	79	412	281	77	358
April, .					333	81	414	296	78	874
May, .					845	71	416	313	70	883
June, .					346	64	410	819	62	381
July, .				.	317	83	400	315	83	398
August,				.	308	72	380	315	76	391
September	, .			.	295	84	879	299	84	883
October,				.	307	91	398	296	90	886
November,				.	293	99	392	268	98	366
December,				.	291	103	394	309	107	416

SCIENT	IF	IC	INS	TRI	JM:	ENTS AN	D APP	LIANCES.	[20 Establishments.]		
January,						337	53	390	374	63	437
February,						342	51	393	371	63	434
March,						346	54	400	388	59	447
April, .						861	53	414	386	65	451
May, .						878	58	431	405	62	467
June, .						371	54	425	388	60	448
July, .						368	54	422	381	61	442
August,						878	58	426	381	58	439
September	•					377	56	433	384	58	442
October,						376	58	434	392	61	453
November					٠.	370	52	422	887	. 59	446
December,						857	57	414	390	58	448

			8	HII	ents.]						
January,						364	-	364	376	-	376
February,					.	389	-	889	393	-	393
March,						474	-	474	462	-	462
April, .						527	-	527	578	-	578
Мау, .					.	589	-	589	609	-	609
June, .					.	555	-	555	557	-	557
July, .		•			.	412	-	412	459	-	459
August,						342	-	342	390	- 1	390
September	, .					364	-	364	319	-	319
October,	•					384	- 1	384	838	-	833
November	, .					344	- 1	344	345	-	345
December,						348	-	848	320	-	320

PERSONS EMPLOYED: BY INDUSTRIES — Continued.

AGGREGATES, BY MONTHS — 1895, 1896 — Continued.

SILK AND SILK GOODS. [9 Establishments.]

					ł		1895		ŀ	1896	
	M	ONTH	3.			Males	Females	Totals	Males	Females	Totals
January,		•				590	1,158	1,748	626	1,233	1,859
February,					.	622	1,190	1,812	599	1,204	1,808
March,					٠.	640	1,227	1,867	603	1,181	1,784
April, .				٠.	.	625	1,208	1,838	600	1,162	1,762
May, .					.	630	1,191	1,821	577	1,124	1,701
June, .					.	644	1,188	1,832	575	1,076	1,651
July, .					.	617	1,075	1,692	479	798	1,272
August,					.	639	1,236	1,875	494	844	1,338
September,					.	643	1,250	1,893	516	917	1,433
October,					.	652	1,293	1,945	586	996	1,532
November,					.	641	1,285	1,926	550	1,099	1,649
December,					.	652	1,272	1,924	539	1,116	1,655

SPORTING AND ATHLETIC GOODS. [9 Establishments.]

			- 1		1	- 11	1		
January,				501	52	553	517	50	567
February,				478	54	532	444	56	500
March,				470	57	527	295	63	358
April, .		• .		355	58	418	473	59	532
May, .				877	59	436	486	41	527
June, .				418	52	465	539	33	572
July, .				546	32	578	541	26	567
August,				537	26	563	579	29	608
September	, .			537	27	564	593	81	624
October,	•		.	621	36	657	575	46	621
November				632	42	674	584	47	631
December,			.	610	48	658	624	54	678
•			- 1	ľ	1	- 11	1		

STONE. [199 Establishments.]

				1	1	1			
				3,620	-	8,620	3,909	- [3,909
				8,664	-	8,664	3,903	- 1	3,908
			.	4,295	-	4,295	4,350	-	4,850
			.]	4,921	-	4,921	5,402	-	5,402
			- 1	5,524	-	5,524	5,729	- 1	5,729
				5,786	-	5,786	5,776	-	5,776
			.	5,738	-	5,738	5,581	-	5,581
				5,811	-	5,811	5,700	-	5,700
, .				5,714	-	5,714	5,674	-	5,674
		•	.	5,671	-	5,671	5,723	- 1	5,723
		•	.	5,228	-	5,228	5,357	-	5,357
•	•	•		4,615	-	4,615	4,470	-	4,470
	• • • • • • • • • • • • • • • • • • • •								

PERSONS EMPLOYED: BY INDUSTRIES—Continued.

AGGREGATES, BY MONTHS—1895, 1896—Continued.

STRAW AND PALM LEAF GOODS. [21 Establishments.]

						1895			1896	
	M	ONTH	8.		Males	Females	Totals	Males	Females	Totals
January,					1,318	2,562	3,880	1,314	2,430	3,744
February,					1,379	2,615	3,994	1,375	2,605	3,980
March,					1,443	2,568	4,011	1,391	2,558	3,949
April, .					1,374	2,458	3,832	1,357	2,491	3,848
Мау, .				.	1,232	2,209	8,441	1,145	1,987	3,132
June, .		•			706	1,044	1,750	570	854	1,424
July, .					448	429	877	394	391	785
August,					463	486	949	435	425	860
September,	, .	•		.	673	691	1,364	625	550	1,178
October,					792	1,007	1,799	751	891	1,642
November,				.	921	1,326	2,247	855	1,225	2,080
December,				.	1,146	2,029	8,175	1,113	1,922	3,03

TALLOW, CANDLES, SOAP, AND GREASE. [60 Establishments.]

					1	1	1	1	ĺ
January,				529	60	589	527	89	616
February,				527	66	598	527	87	614
March,				535	71	606	527	91	618
April, .				538	75	613	533	91	624
May, .				540	81	621	529	90	619
June, .				545	89	634	532	94	626
July, .				540	101	641	540	96	686
August,				541	91	632	530	87	617
September	, .			550	97	647	521	85	606
October,				54 0	97	637	512	63	575
November	, .			586	91	627	531	80	611
December,				527	86	618	519	78	597
					Į.	I.			

TOBACCO, SNUFF, AND CIGARS. [48 Establishments.]

								1		
January,					1,042	408	1,450	1,031 .	392	1,423
February,					1,122	431	1,553	1,087 .	402	1,489
March,					1,108	442	1,550	1,079	403	1,482
April, .					1,138	461	1,599	1,086	409	1,495
Мау, .					1,169	479	1,648	1,175	449	1,624
June, .					1,179	483	1,662	1,235	485	1,720
July, .				.	1,186	484	1,670	1,213	471	1,684
August,					1,194	498	1,687	1,169	451	1,620
September	, .				1,200	485	1,685	1,122	420	1,542
October,				.	1,209	467	1,676	1,092	413	1,505
November,	, .	٠.		.	1,158	450	1,608	1,089	400	1,489
December,	•		·		1,101	402	1,508	1,053	877	1,430
				- 1			i i	1 1		

PERSONS EMPLOYED: BY INDUSTRIES—Continued.

AGGREGATES, BY MONTHS—1895, 1896—Continued.

TOYS AND GAMES (CHILDREN'S). [11 Establishments.]

				1		1895			1896	
	м	ONTH:	8.		Males	Females	Totals	Males	Females	Totals
January,					217	55	272	. 235	41	276
February,					247	54	301	260	55	818
March,				.	261	60	821	280 .	67	847
April, .				.	281	79	360	.319	. 89	408
Мау, .					802	89	891	831	. 96	427
June, .					813	84	897	854	101	450
July, .					289	81	870	306	. 88	. 394
August,				.	827	84	411	342	96	431
September	, .				855	106	461	858	102	45
October,					409	117	517	879	135	514
November,	•		•		404	129	588	386	141	52
December,					314	97	411	857	127	484

TRUNKS AND VALISES. [7 Establishments.]

							l .	i	
January,				71	10	81	58	1	59
February,				79	9	88	67	7	74
March,			•	90	9	99	77	6	83
April, .				79	9	88	71	7	78
May, .				78	9	87	68	8	76
June, .				79	11	90	• 70	8	78
July, .				77	10	87	63	7	70
August,				83	10	93	68	7	75
September	, .			81	10	91	, 65	8	73
October,				84	9	98	63	8	71
November	, .			81	9	90	58	8	66
December,				78	7	80	49	1	50
						1	1		

WHIPS, LASHES, AND STOCKS. [15 Establishments.]

					- 1	- 1	1	- 11		l	
January,			•		.	238	114	847	256	111	367
February,					.	252	115	367	260	113	378
March,					.	257	111	368	263	114	877
April, .					.	262	110	372	258	111	. 864
May, .					.	261	105	366	251	108	359
June, .						254	108	362	226	95	321
July, .						261	116	877	287	104	341
August,						272	116	888	213	85	298
September	, .					272	125	397	220	86	306
October,						273	126	399	220	92	312
November	, .					273	123	396	218	93	311
December,		•	•	•		242	105	847	288	107	340
					I						

PERSONS EMPLOYED: BY INDUSTRIES—Continued. AGGREGATES, BY MONTHS—1895, 1896—Continued.

WOODEN GOODS. [153 Establishments.]

							1895		1896				
Months.					Males	Females	Totals	Males	Females	Totals			
January,						2,463	61	2,524	2,567	54	2,621		
February,			•			2,427	57	2,484	2,557	57	2,614		
March,						2,555	57	2,612	2,503	60	2,563		
April, .						2,574	60	2,634	2,586	62	2,598		
May, .					.	2,719	61	2,780	2,572	66	2,638		
June, .					.	2,776	61	2,837	2,607	65	2,672		
July, .					.	2,701	55	2,756	2,597	63	2,660		
August,						2,772	43	2,815	2,609	56	2,665		
September	, .					2,832	49	2,881	2,674	49	2,723		
October,						2,862	59	2,921	2,636	52	2,688		
November,					.	2,842	68	2,905	2,490	54	2,544		
December,	• .				.	2,789	62	2,851	2,350	63	2,413		

WOOLLEN GOODS. [122 Establishments.]

			1	9,796	5,444	15,240	9,898	5,812	14,705
	•	Ċ		9,917	5,586	15,503	9,678	4 5.420	15,098
	•	·		, 1	•		•	('	15,453
	•	·		- 1	•		•	, ,	14,881
	:	•			•	1 11	•	1 -	14,413
	•	·	-	- 1	•	1 ' II	•	1 '	13,289
				' 1		' "	•	1 '	12,197
					•		•	1 .	11,302
			. 1	10,450		1	•		11,823
			.	10,664	5,941	16,605	8,901	4,626	13,527
				10,555	5,886	16,441	8,987	4,760	18,747
				10,400	5,793	16,193	8,913	4,770	13,683
					10,280 10,485 10,569 10,359 10,362 10,450 10,664 10,555				

WORSTED GOODS [27 Establishments.]

			- 1	1		1 1	ı i		ĺ
January,				6,127	5,691	11,818	6,853	6,163	13,016
February,				5,924	5,617	11,541	6,845	6,175	13,020
March,				6,159	5,709	11,868	6,272	5,643	11,915
April, .				6,398	5,917	12,315	6,402	5,624	12,026
May, .				6,539	5,970	12,509	6,223	5,534	11,757
June, .				6,536	5,924	12,460	5,252	4,838	10,090
July, .				6,511	5,922	12,433	5,044	4,657	9,701
August,				6,623	5,891	12,514	5,819	5,344	11,163
September,			.	6,617	5,835	12,452	5,693	5,160	10,853
October,				6,718	5,941	12,659	5,091	4,507	9,598
November,			.	6,794	6,115	12,909	5,923	5,230	11,153
December,	•	•		6,272	5,771	12,043	5,874	5,643	11,517
		 				1 1	i I		

PERSONS EMPLOYED: BY INDUSTRIES - Concluded. AGGREGATES, BY MONTHS - 1895, 1896 - Concluded.

ALL INDUSTRIES. [4,609 Establishments.]

							1895			1896			
MONTHS.						Males	Females	Totals	Males	Females	Totals		
January,		٠.				195,170	104,282	299,452	202,454	106,043	308,497		
February,			•			195,196	104,909	300,105	204,140	106,973	311,113		
March,					.	198,678	106,391	305,069	204,501	106,642	311,143		
April, .						200,037	106,226	306,263	204,720	104,948	309,668		
Мау, .						204,100	106,502	810,602	205,399	104,624	310,023		
June, .					.	205,600	104,914	310,514	200,441	100,703	301,144		
July, .						202,415	101,120	308,535	192,237	93,631	285,868		
August,					.	204,691	101,863	306,554	187,060	89,386	276,446		
September	, .	•			.	206,678	104,155	310,838	188,436	92,861	281,297		
October,						206,471	105,791	312,262	193,876	98,891	292,767		
November,						206,339	106,715	313,054	194,893	100,627	295,520		
December,						204,503	106,152	310,655	195,806	102,875	298,681		

WAGES PAID: BY INDUSTRIES.

WAGES PAID: BY INDUSTRIES.

1895, 1896,

[In this presentation, the figures given under "Total Amount Paid in Wages During the Year" represent the returns made by the same establishments, in each industry, for the years 1895 and 1896, the whole number of establishments considered in "All Industries" being 4,609. Comparison is made, as regards the total amount paid in wages, between these two years. The relative increase or decrease in 1896 as compared with 1895 is given with its equivalent percentage. It must be borne in mind that these figures represent the sums paid to wage earners only and do not include amounts paid to officers, clerks, or other salaried persons.]

Industries.	Number of Estab- lishments	TOTAL A	GES DURING	Increase (+), or Decrease (-), in 1896		
	Con- sidered	1895	1896	Amounts	Percent- ages	
Agricultural implements,	8	\$279,196	\$278,914	-\$282	-0.10	
Arms and ammunition,	12	761,695	779,521	+17,826	+2.34	
Artisans' tools,	69	966,804	1,032,199	+65,895	+6.82	
Awnings, sails, tents, etc.,	32	94,012	82,372	-11,640	-12.38	
Bicycles, tricycles, etc.,	10	1,178,004	1,232,598	+54,594	+4.63	
Boots and shoes,	605	20,838,632	20,834,331	-4,301	-0.02	
Boxes (paper and wooden),	158	1,491,281	1,423,511	-67,770	-4.54	
Brick, tiles, and sewer pipe,	56	563,922	588,764	+24,842	+4.41	
Brooms, brushes, and mops,	19	248,720	249,660	+940	+0.38	
Burial cases, caskets, coffins, etc., .	7	124,394	124,143	-251	-0.20	
Buttons and dress trimmings,	15	270,685	257,489	-13,196	-4.88	
Carpetings,	12	1,709,689	1,443,472	-266,217		
Carriages and wagons,	143	1,261,459	1,140,027	-121,432	9.63	
Cement, kaolin, lime, and plaster, .	10	55,538	56,062	+524		
Chemical preparations (compounded),	12	194,204	188,357	-5,847	•	
Clocks, watches, and jewelry,	99	1,799,807	1,606,867	-192,940		
Clothing	130	2,863,300	2,550,241	-813,059	ı	
Cooking, lighting, and heating ap-		' '	,,	•		
paratus,	85	945,129	966,598	+21,469	+2.27	
Cordage and twine,	29	798,013	855,974	+62,961	+7.94	
Corks, bungs, and taps,	3	13,229	15,700	+2,471		
Cotton goods,	169	26,234,125	25,865,194	-368,931		
Cotton, woollen, and other textiles, .	2	619,096	645,086	+25,990		
Crayons, pencils, crucibles, etc., .	4	12,334	12,501	+167		
Drugs and medicines,	27	272,687	260,542	-12,145		
Dyestuffs,	8	75,384	58,986	-16,398		
Earthen, plaster, and stone ware, .	7	113,634	99,844	-13,790	Ī.	
Electrical apparatus and appliances, .	23	1,541,440	1,381,200	-160,240		
Electroplating,	12	62,011	71,229	+9,218		
Emery and sand paper and cloth, etc.,	10	152,620	176,925	+24,305	•	
Fancy articles, etc.,	11	86,242	85,548	-694	-0.80	
Fertilizers,	8	80,032	31,187	+1,155		
Fine arts and taxidermy,	8	5,780	8,480	+2,700		
Fireworks and matches,	4	32,848	85,774	+2,926	+8.91	
Flax, hemp, jute, and linen goods, .	10	684,796	639,581	-45,215	-6.60	
Food preparations,	319	8,042,852	8,105,154	+62,302	+2.05	
Furniture	119	1,713,137	1,578,746	-134,391	—7.84	
Glass,	14	177,338	141,667	-35,671	-20.11	

WAGES PAID: BY INDUSTRIES - Continued.

WAGES PAID: BY INDUSTRIES-1895, 1896-Concluded.

WAGES PAID: BY INI	OSTRIE	5 — 189E	, 1980 ·	— Conclu	iea.
Industries.	Number of Estab- lishments	TOTAL A	AMOUNT GES DURING YEAR	INCREAS OR DECREA 189	RE (-). IN
	Con- sidered	1895	1896	Amounts	Percent- ages
Glue, isinglass, and starch,	23	\$150,174	\$159,107	+\$8,933	+5.95
Hair work (animal and human), .	7	57,188	48,864	-8,319	-14.55
Hose: rubber, linen, etc.,	4	287,174	299,589	+62,415	+26.32
Hosiery and knit goods,	42	1,863,085	1,718,096	-144,989	-7.78
Ink, mucilage, and paste,	7	32,869	32,711	158	-0.48
Ivory, bone, shell, and horn goods,					
etc.,	18	324,386	274,852	-50,034	-15.42
Leather,	143	3,448,203	2,984,515	-463,688	-18.45
Liquors and beverages (not spirit-			•		
uous),	28	103,450	92, 570	10,880	-10.52
Liquors: malt, distilled, and fer-		}			
mented,	57	1,118,644	1,169,720	+51,076	+4.57
Lumber,	32	844,754	336,848	7,906	-2.29
Machines and machinery,	871	9,072,876	9,731,509	+658,633	+7.26
Metals and metallic goods,	382	7,479,643	7,218,118	-261,525	-8.50
Mixed textiles,	12	259,814	230,313	29,501	-11.85
Models, lasts, and patterns,	49	309,146	314,357	+5,211	+1.69
Musical instruments and materials, .	65	1,400,562	1,143,327	-257,235	-18.37
Oils and illuminating fluids,	9	50,684	56,903	+6,219	+12.27
Paints, colors, and crude chemicals, .	23	128,361	115,784	-12,577	9.80
Paper and paper goods,	123	4,723,678	4,476,285	-247,393	-5.24
Perfumes, toilet articles, etc.,	4	9,426	8,533	893	-9.47
Photographs and photographic ma-					
terials,	24	217,489	220,561	+3,072	
Polishes and dressing,	88	160,402	149,479	-10,923	-6.81
Printing, publishing, and bookbinding	1 1	1,355,851	1,368,727	+13,376	+0.99
Print works, dye works, and bleach-	1 1				ľ
eries,	47	2,738,339	2,642,673	95,666	-3.49
Railroad construction and equip-					
ment,	16	1,378,904		11	
Rubber and elastic goods,	41	3,626,898		11	i
Saddlery and harness,	41	216,194	203,961	-12,233	-5.66
Scientific instruments and appli-					
ances,	20	198,385	1	+25,558	
Shipbuilding,	51	264,918	1 '	+5,550	
Silk and silk goods,	9	656,478	1	II -	
Sporting and athletic goods,	9	242,881	1	+2,240	
Stone,	199	2,598,983	1	11	1
Straw and palm leaf goods,	21	1,136,826		+6,255	
Tallow, candles, soap, and grease,	60	309,155		11	1
Tobacco, snuff, and cigars, Toys and games (children's),	48 11	1,015,278	1	11	l
Trunks and valises.	7	163,579	1	11	
•	15	42,025		11	1
Whips, lashes, and stocks,		159,891	187,115	11	i
Woollen goods,	158 122	1,468,041	1,408,235	59,806	
Worsted goods,	27	5,987,401	4,963,615 3,848,327	1,023,786 642,130	1
- •		4,490,457			
ALL INDUSTRIES,	4,609	\$130,845,551	\$126,918,872	-\$3,932,17 9	-8.01
	.1	II.	ı	II	

AVERAGE YEARLY EARNINGS: BY INDUSTRIES.

1895, 1896.

[The average yearly earnings, shown in this presentation, have been obtained by dividing the total amount paid in wages during the years 1895 and 1896 (pages 67 and 68) by the average number of persons employed during the same years (pages 27 to 30 inclusive). The relative increase or decrease in average yearly earnings in 1896 as compared with 1895 is given with its equivalent percentage. It must be borne in mind that these figures represent the sums paid to wage earners only and do not include amounts paid to officers, clerks, or other salaried persons.]

Industries.	Number of Estab- lishments		rage Carnings	Amounts Percentages	
	Con- sidered	1895	1896	Amounts	Percent-
Agricultural implements,	. 8	\$514.17	\$491.05	-\$23.12	-4.50
Arms and ammunition,	. 12	477.25	508.88	+31.58	+6.62
Artisans' tools,	. 69	549.97	560.87	+10.40	+1.89
Awnings, sails, tents, etc.,	. 82	583.98	531.48	52.50	-8.99
Bicycles, tricycles, etc.,	. 10	578.80	618.15	+39.85	+6.89
Boots and shoes,	605	482.60	492.97	+10.37	+2.15
Boxes (paper and wooden),	158	390.90	884.84	6.06	-1.55
Brick, tiles, and sewer pipe,	. 56	446.49	444.85	-2.14	-0.48
Brooms, brushes, and mops,	. 19	355.81	859.74	+4.43	+1.25
Burial cases, caskets, coffins, etc., .	. 7	618.88	626.98	+8.10	+1.81
Buttons and dress trimmings,	. 15	852.45	832.24	-20.21	-5.78
Carpetings,	. 12	370.38	841.09	-29.29	-7.91
Carriages and wagons,	143	580.51	578.11	-2.40	-0.41
Cement, kaolin, lime, and plaster, .	. 10	462.82	471.11	+8.29	+1.79
Chemical preparations (compounded),	. 12	559.67	568.94	+4.27	+0.76
Clocks, watches, and jewelry,	. 99	505.28	489.45	-15.83	-8.18
Clothing,	. 130	395.98	867.68	-28.80	—7.15
Cooking, lighting, and heating apparatus	85	652.26	628.48	-23.78	-8.65
Cordage and twine,	29	883.62	846.88	+13.21	+8.96
Corks, bungs, and taps,	. 3	867.47	865.12	-2.35	-0.64
Cotton goods,	. 169	328.77	831.86	+2.59	+0.79
Cotton, woollen, and other textiles, .	. 2	376.58	365.90	-10.68	-2.84
Crayons, pencils, crucibles, etc.,	. 4	300.88	847.25	+46.42	+15.48
Drugs and medicines,	. 27	417.59	418.56	-4.03	-0.97
Dyestuffs,	. 8	495.95	468.14	-27.81	-5.61
Earthen, plaster, and stone ware, .	. 7	494.06	477.72	-16.34	-3.81
Electrical apparatus and appliances,	. 28	525.19	510.61	-14.58	-2.78
Electroplating,	. 12	521.10	556.48	+85.88	+6.79
Emery and sand paper and cloth, etc.,	. 10	548.99	539.41	-9.58	-1.75
Fancy articles, etc.,	. 11	360.85	365.59	+4.74	+1.81
Fertilizers,	. 8	612.90	611.51	-1.39	-0.28
Fine arts and taxidermy,	. 8	578.00	565.88	-12.67	-2.19
Fireworks and matches,	. 4	395.76	380.57	-15.19	-8.84

WAGES PAID: BY INDUSTRIES -- Continued.

AVERAGE YEARLY EARNINGS: BY INDUSTRIES — 1895, 1896

	- Conclude	ea			
Industries.	Number of Estab- lishments		rage Earnings	INCREAS OB DECREA 186	e (十), se (一), in de
And the second s	Con- sidered	1895	1896	Amounts	Percent-
Flax, hemp, jute, and linen goods,	10	\$302.61	\$282.25	-\$20.36	-6.73
Food preparations,	319	448.53	452.71	+4.18	+0.93
Furniture,	119	489.19	479.42	-9.77	-2.00
Glass,	14	512.54	472.22	-40.82	-7.87
Glue, isinglass, and starch,	23	481.53	399.77	-81.76	-7.36
Hair work (animal and human),	7	883.78	836.99	-46.79	-12.19
Hose: rubber, linen, etc.,	4	444.98	402.13	-42.85	-9.63
Hosiery and knit goods,	42	332.40	804.80	-28.10	-8.45
Ink, mucilage, and paste,	7	518.58	554.42	+40.84	+7.95
Ivory, bone, shell, and horn goods, etc., .	18	400.97	892.49	-8.48	-2.11
Leather,	143	481.06	470.22	-10.84	-2.25
Liquors and beverages (not spirituous), .	1 1	588.80	522.99	-15.81	-2.93
Liquors: malt, distilled, and fermented, .		693.52	695.85	+2.33	+0.34
Lumber,	32	447.15	460.80	+13.65	+3.05
Machines and machinery,	871	535.81	538.19	+2.38	+0.44
Metals and metallic goods,	382	509.08	506.82	-2.21	-0.43
Mixed textiles	12	363.38	344.78	-18.60	-5.12
Models, lasts, and patterns,	49	712.32	706.42	-5.90	-0.83
Musical instruments and materials,	65	625.25	618.37	-11.88	-1.90
Oils and illuminating fluids	9	527.96	517.30	-10.66	-2.02
Paints, colors, and crude chemicals.	23	543.90	573.19	+29.29	+5.39
Paper and paper goods	123	405.57	402.83	-2.74	-0.68
Perfumes, toilet articles, etc.,	4	325.08	341.32	+16.29	+5.01
Photographs and photographic materials,		452.16	432.47	-19.69	-4.35
Polishes and dressing	38	525.91	490.10	-85.81	-6.81
Printing, publishing, and bookbinding, .		526.76	533.41	+6.65	+1.26
Print works, dye works, and bleacheries,		424.15	419.54	-4.61	-1.09
Railroad construction and equipment,	16	559.41	580.58	+21.17	+8.78
Rubber and elastic goods,	41	432.19	425.11	-7.08	-1.64
Saddlery and harness,	41	540.49	582.54	—7.95	-1.47
Scientific instruments and appliances,	20	475.74	500.99	+25.25	+5.81
Shipbuilding,	51	620.41	624.63	+4.22	+0.68
Silk and silk goods,	9	355.04	359.08	+4.04	+1.14
Sporting and athletic goods,	9	440.00	433.08	-6.92	-1.57
Stone,	199	514.14	524.24	+10.10	+1.96
Straw and palm leaf goods,	21	435.23	463.54	+28.31	+6.50
Tallow, candles, soap, and grease,	60	497.08	493.08	—3.95	-0.79
Tobacco, snuff, and cigars,	48	630.22	631.76	+1.54	+0.24
Toys and games (children's),	11	414.12	397.84	-16.28	-8.93
Trunka and vallege	7	477.56	484.69	+7.18	+1.49
Whine leahes and stocks	15	426.38	408.28	-23.10	-5.42
Wooden goods,	153	532.48	587.49	+5.01	+0.94
Woollen made	122	870.99	863.08	-7.91	-2.18
Worsted mode	27	365.17	863.08 840.02	-7.91 -25.15	-2.18 -6.89
A T					
ALL INDUSTRIES,	4,609	\$425.89	\$425.16	-\$0.23	-0.05

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES.

1895. 1896.

[In this presentation is shown, for 1895 and 1896, a classification of the weekly wage, ranging from under \$5 per week to \$20 and over, and the number of males and females receiving such wage. The returns were made by manufacturers to cover the week during which the largest number of persons was employed.]

AGRICULTURAL IMPLEMENTS. [8 Establishments.]

CLASSIFICATION	or W	TREKI	. T		1895			1896		
WAGE	•			Males	Females	Totals	Males	Females	Totals	
Under \$5,				18		18	24	-	24	
\$5 but under \$6,			.	15	-	15	17	-	17	
\$6 but under \$7,			.	19	-	19	83	-	33	
\$7 but under \$8,			.	67	-	67	95	-	95	
\$8 but under \$9,				59	-	59	79	-	79	
\$9 but under \$10,			.	84		84	70	-	70	
\$10 but under \$12,			.	171	-	171	124	-	124	
\$12 but under \$15,				111	-	111	138	-	138	
\$15 but under \$20,			.	42	-	42	53	-	53	
\$20 and over, .				16	-	16	11	-	11	
TOTALS, .				602	-	602	644	-	644	

ARMS AND AMMUNITION. [12 Establishments.]

		1				1	1	
Under \$5,			238	12	250	193	2	195
\$5 but under \$6,	٠.	.	64	-	64	101	-	101
\$6 but under \$7,		.	149	28	177	181	6	137
\$7 but under \$8,			166	14	180	171	20	191
\$8 but under \$9,			110	4	114	125	11	136
\$9 but under \$10,		.	135	56	191	178	36	214
\$10 but under \$12,			179	64	243	212	77	289
\$12 but under \$15.			281	19	800	262	20	282
\$15 but under \$20,		.	182	-	182	218	-	218
\$20 and over, .		.	133	-	138	138	-	133
Totals, .			1,637	197	1,884	1,724	172	1,896
		- 1	,	1	1			

WAGES PAID: BY INDUSTRIES - Continued.

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES—1895, 1896 — Continued.

ARTISANS' TOOLS. [69 Establishments.]

CLASSIFICATION O	F W	EEKL	, I		1895			1896	
Wage.				Males	Females	Totals	Males	Females	Totals
Under \$5,						148	82	Females 15 4 20 11 4 1 1	97
\$5 but under \$6,		•	.	79	14	98	52	4	56
\$6 but under \$7,			.	104	10	114	132	20	152
\$7 but under \$8,			.	148	11	159	142	11	158
\$8 but under \$9,				141	6	147	165	4	169
\$9 but under \$10 ,				199	8	207	230	4	234
\$10 but under \$12,				802	2	304	814	1	315
\$12 but under \$15,			.	411	1	412	878	1	874
\$15 but under \$2 0,			.	279	-	279	842	-	342
\$20 and over, .	•			119	- 1	119	128	-	128
TOTALS, .			.[1,919	. 68	1,982	1,960	60	2,020

AWNINGS, SAILS, TENTS, ETC. [32 Establishments.]

						1		
Under \$5,			-	-	-	1	7	8
\$5 but under \$6,			6	8	9	5	6	11
\$6 but under \$7,			, 5	10	15	5	18	18
\$7 but under \$8,			7	15	22	8	7	10
\$8 but under \$9,			-	18	18	-	20	20
\$9 but under \$10	, .		6	8	9	4	7	11
\$10 but under \$12,		•	15	-	15	11	· -	11
\$12 but under \$15,		•	26	1	27	26	1	27
\$15 but under \$20,			132	-	132	105	-	105
\$20 and over, .			14	-	14	14	-	14
TOTALS, .	•	•	211	50	261	174	61	235

BICYCLES, TRICYCLES, ETC. [10 Establishments.]

			- 1	1 1	1	1	1	1	
Under \$5,				105	6	111	181	3	184
\$5 but under \$6,				48	2	50	52	2	54
\$6 but under \$7,		•		83	22	105	102	7	109
\$7 but under \$8,				115	87	152	131	8	139
\$8 but under \$9,		•		107	29	136	152	81	183
\$9 but under \$10,				309	29	888	385	6	391
\$10 but under \$12,			.	872	10	382	465	6	471
\$12 but under \$15,				646	11	657	841	10	851
\$15 but under \$20,		•		472	7	479	586	7	593
\$20 and over, .	•		•	97	- /	97	137	-	187
TOTALS, .				2,854	153	2,507	2,982	80	3,062
				1		1	<u> </u>		

WAGES PAID: BY INDUSTRIES - Continued.

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES — 1895, 1896 — Continued.

BOOTS AND SHOES. [605 Establishments.]

CLASSIFICATION O	r T	Verki	LY		1895		1896			
WAGE.				Males	Females	Totals	Males	Females	Totals	
Under \$5,				1,905	2,785	4,640	1,879	2,926	4,805	
\$5 but under \$6,				1,404	1,901	8,805	1,808	1,687	2,995	
\$6 but under \$7,				1,815	2,061	3,876	1,861	1,967	3,828	
\$7 but under \$8,				2,222	1,842	4,064	2,187	1,872	4,009	
\$8 but under \$9,			.	2,837	1,615	8,952	2,441	1,713	4,154	
\$9 but under \$10,				8,412	1,729	5,141	8,308	1,808	5,111	
\$10 but under \$12,			.]	5,335	2,049	7,384	5,271	2,264	7,535	
\$12 but under \$15,			.]	7,988	1,505	9,498	7,838	1,457	9,295	
\$15 but under \$20 ,				7,024	513 .	7,537	6,623	615	7,238	
\$20 and over, .	•			2,432	32	2,464	2,385	56	2,441	
TOTALS, .				85,874	15,982	51,856	35,046	16,365	51,411	

BOXES (PAPER AND WOODEN). [158 Establishments.]

				1	l	1	1		
Under \$5,				139	587	726	124	552	676
\$5 but under \$6,			•	82	325	407	91	888	424
\$6 but under \$7,		•		163	849	512	172	366	538
\$7 but under \$8,	•			251	291	542	242	269	511
\$8 but under \$9,	•			215	185	400	223	124	847
\$9 but under \$10,				460	138	598	452	124	576
\$10 but under \$12,				428	102	530	428	96	524
\$12 but under \$15,				424	49	473	402	50	452
\$15 but under \$20,				215	6	221	208	8	211
\$20 and over, .				28	1	29	82	1	33
TOTALS, .				2,405	2,083	4,438	2,369	1,923	4,292
				l			1 1	l	

BRICK, TILES, AND SEWER PIPE. [56 Establishments.]

			1	1	11	1	l l	
Under \$5,			93	1	94	108	1	109
\$5 but under \$6,			40	2	42	97	2	99
\$6 but under \$7,			57	-	57	109	2	111
\$7 but under \$8,	•		179	1	180	172	-	172
\$8 but under \$9,			270	-	270	821	-	321
\$9 but under \$10,			709	-	709	720	-	720
\$10 but under \$12,			481	1	432	881	-	831
\$12 but under \$15,			202	-	202	229	-	229
\$15 but under \$20,			89	_	89	98	-	93
\$20 and over, .			17	-	17	27	-	27
TOTALS, .			2,087	5	2,092	2,207	5	2,212

WAGES PAID: BY INDUSTRIES - Continued.

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES — 1895, 1896 — Continued.

BROOMS, BRUSHES, AND MOPS. [19 Establishments.]

CLASSIFICATION	OF	w	KRKL			1895		1896				
₩ A G				-	Males	Females	Totals	Males	Females	Totals		
Under \$5,			•		65	173	238	78	198	276		
\$5 but under \$6	3,				29	79	108	52	70	122		
\$6 but under \$	7,				26	87	63	29	26	55		
\$7 but under \$5	3,				30	24	54	29	21	50		
\$8 but under),				12	8	20	18	3	21		
\$9 but under \$10),				49	6	55	35	6	41		
\$10 but under \$1:	2,				47	6	53	88	6	44		
\$12 but under \$10	5,				65	1	66	69	1	70		
\$15 but under \$20),				72	l	72	68	-	68		
\$20 and over, .			•		27	-	27	29	-	29		
TOTALS, .					422	334	756	445	831	776		

BURIAL CASES, CASKETS, COFFINS, ETC. [7 Establishments.]

						1	1		
Under \$5,				4	• 1	5	4	1	5
\$5 but under \$	6,			4	-	4	5	_	5
\$6 but under \$	7,			8	2	10	6	8	9
\$7 but under \$	8,			9	8	12	9	_	9
\$8 but under \$	9,			10	5	15	7	4	11
\$9 but under \$1	0,			8	5	13	11	4	15
\$10 but under \$1	2,			27	8	30	18	5	23
\$12 but under \$1	5,			36	1	87	54	8	57
\$15 but under \$2	0,			76	-	76	59	_	59
\$20 and over, .			•	7	-	7	8		8
TOTALS,		•		189	20	209	181	20	201

BUTTONS AND DRESS TRIMMINGS. [15 Establishments.]

						1		
Under \$5,			88	216	254	44	185	229
\$5 but under \$6,		•	21	194	215	89	211	250
\$6 but under \$7,			80	70	100	43	98	141
\$7 but under \$8,		•	43	41	84	46	56	102
\$8 but under \$9,			39	22	61	85	19	54
\$9 but under \$10,			43	11	54	42	9	51
\$10 but under \$12,			48	7	55	54	8	62
\$12 but under \$15,			53	4	57	59	5	64
\$15 but under \$20,			41	1	42	34	. 1	35
\$20 and over, .			7.	-	7	10	-	10
TOTALS, .			363	566	929	406	592	998

WAGES PAID: BY INDUSTRIES - Continued.

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES — 1895, 1896 — Continued.

CARPETINGS. [12 Establishments.]

CLASSIFICATION O	РW	RRKL			1895		1896			
WAGE.	- ''			Males	Females	Totals	Males	Females	Totals	
Under \$5,				403	736	1,189	875	612	987	
\$5 but under \$6,			.]	127	510	637	175	532	707	
\$6 but under \$7,				267	480	747	223	898	621	
\$7 but under \$3,			.	278	275	553	180	406	586	
\$8 but under \$9,			.	120	217	887	236	257	493	
\$9 but under \$10,				266	234	500	249	166	415	
\$10 but under \$12,		·	.	268	93	361	289	145	434	
\$12 but under \$15,				262	8	265	264	18	277	
\$15 but under \$20,				185	-	185	201	-	201	
\$20 and over, .				60	-	60	67	-	67	
Totals, .				2,236	2,548	4,784	2,259	2,529	4,788	

CARRIAGES AND WAGONS. [143 Establishments.]

				1	l "	1 1	11		1
Under \$5,				29	2	81	44	3	47
\$5 but under \$6,				36	5	41	27	5	82
\$6 but under \$7,				81	8	84	57	4	61
\$7 but under \$8,				80	9	89	103	5	108
\$8 but under \$9,				103	1	104	84	2	86
\$9 but under \$10,				267	2	269	264	4	268
\$10 but under \$12,				498	2	500	424	-	424
\$12 but under \$15,				885	-	885	752	1	758
\$15 but under \$20,				600	1	601	599	-	599
\$20 and over, .	•			91	-	91	62	-	62
TOTALS, .		•	•	2,670	25	2,695	2,416	24	2,440

CEMENT, KAOLIN, LIME, AND PLASTER. [10 Establishments.]

•	1 - - 18 - 94		1 - 13 - 94	2 - - 11 4 84	-	11 4
	-	-	-	4	- - -	4.
•	-	-	-	4	- - -	4.
•	-	-	-	4	-	4.
	_	-	-	_	-	4.
	94	_	04	84		مه ا
		_	J 22	O%	-	84
	4	-	4	8	-	8
	19	_	19	20	-	20
	1	-	1	11	-	11
	-	-	- 1	_		_
	182	-	182	135	-	185
	•	. 19	. 19 - . 1 - 	. 19 - 19 . 1 - 1 	. 19 - 19 20 . 1 - 1 11 	. 19 - 19 20 - 1 - 1 11 -

WAGES PAID: BY INDUSTRIES - Continued.

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES—1895, 1896
— Continued.

CHEMICAL PREPARATIONS (COMPOUNDED). [12 Establishments.]

CLASSIFICATION O	r W	RRKI.			1895		1896			
WAGE.			-	Males	Females	Totals	Males	Females	Totals	
Under \$5,	•	•		1	1	. 2	_	2	2	
\$5 but under \$6,				1	-	1	. 3	-	8	
\$6 but under \$7,		•		8	-	8	8	-	8	
\$7 but under \$8,				4	-	4	4	-	4	
\$8 but under \$9,				17	1	18	14	1	15	
\$9 but under \$10,				128	-	128	137	-	137	
\$10 but under \$12,				70	_	70	91	- 1	91	
\$12 but under \$15,				137	_	137	88	-	88	
\$15 but under \$20,				14	-	14	20	- 1	20	
\$20 and over, .				2	-	2	1	-	1	
Totals, .				882	2	384	366	8	369	

CLOCKS, WATCHES, AND JEWELRY. [99 Establishments.]

	 					1		
Under \$5,			188	248	881	122	192	314
\$5 but under \$6,	•		152	258	410	115	241	356
\$6 but under \$7,			148	245	888	96	217	313
\$7 but under \$8,			154	260	414	190	232	422
\$8 but under \$9,			185	119	804	192	148	340
\$9 but under \$10,			184	167	851	210	111	821
\$10 but under \$12,			412	-67	479	389	89	478
\$12 but under \$15,			567	48	613	552	40	592
\$15 but under \$20,		.	638	21	659	597	10	607
\$20 and over, .		.]	309	6	315	308	10	818
Totals, .			2,882	1,432	4,314	2,771	1,290	4,061

CLOTHING. [130 Establishments.]

Totals,			•		2,523	6,000	8,523	2,816	5,979	8,295
\$20 and over,	•		•	.	322	7	329	808	9	812
\$15 but under	2 0,	•	•	-	401	43	444	372	48	420
\$12 but under	\$15,		•		425	160	585	870	157	527
\$10 but under	12 ,			•	310	837	647	330	331	661
\$9 but under	1 0,				218	442	660	237	520	757
\$8 but under	\$ 9,	• '			169	640	809	177	855	1,032
\$7 but under	\$ 8,				193	838	1,031	144	971	1,115
\$6 but under	\$7,			.	160	1,289	1,449	143	1,088	1,231
\$5 but under	\$ 6,				122	985	1,057	101	888	989
Under \$5, .	•	•	•	•	208	1,309	1,512	139	1,112	1,251

WAGES PAID: BY INDUSTRIES - Continued.

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES-1895, 1896 - Continued.

COOKING, LIGHTING, AND HEATING APPARATUS. [85 Establishments.]

CLASSIFICATION O	r W	REKL			1895		1896			
WAGE.			_	Males	Females	Totals	Males	Females	Totals	
Under \$5,				83	-	88	28	2	30	
\$5 but under \$6,				20	-	20	18	-	18	
\$6 but under \$7,			. [46	-	46	43	-	43	
\$7 but under \$8,			.	68	2	70	58	2	55	
\$8 but under \$9,			.	49	-	49	67	-	67	
\$9 but under \$10,			.	210	1	211	210	1	211	
\$10 but under \$12,			.	196	2	198	234	2	236	
\$12 but under \$15,				418		418	418	-	413	
\$15 but under \$20,				387	-	387	408	-	403	
\$20 and over, .				286	-	286	268	i -	263	
TOTALS, .				1,708	5	1,713	1,727	7	1,734	

CORDAGE AND TWINE. [29 Establishments.]

Under \$5,				246 ·	600	846	148	553	699
\$5 but under \$6,				111	287	398	118	409	527
\$6 but under \$7,				152	200	352	145	197	342
\$7 but under \$8,				143	110	253	95	97	192
\$8 but under \$9,				482	24	506	574	82	606
\$9 but under \$10,				139	5	144	327	9	336
\$10 but under \$12,	•			108	1	109	104	10	114
\$12 but under \$15,		•		114	-	114	118	-	118
\$15 but under \$20,		•		74	-	74	98	-	98
\$20 and over, .		•		15	-	15	19	-	19
TOTALS, .			•	1,584	1,227	2,811	1,789	1,307	8,046

CORKS, BUNGS, AND TAPS. [3 Establishments.]

						l I	1	l .	
Under \$5,				7	2	9	4	8	12
\$5 but under \$6,		•		8	1	4	1	6	7
\$6 but under \$7,				9	-	9	8	-	8
\$7 but under \$8,				1	1	2	1	-	1
\$8 but under \$9,				-	-	-	6	-	6
\$9 but under \$10,				6	-	6	8	1	4
\$10 but under \$12,				1	-	1	4	_	4
\$12 but under \$15,				5	-	5	8	-	8
\$15 but under \$20,				8	-	3	1	-	1
\$20 and over, .				1	-	1	-	-	-
TOTALS, .	•	•	•	86	4	40	36	15	51
-				'		<u>' </u>	<u> </u>	<u> </u>	<u> </u>

WAGES PAID: BY INDUSTRIES - Continued.

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES — 1895, 1896 — Continued.

COTTON GOODS. [169 Establishments.]

CLASSIFICATION OF WEEKLY						1895		1896			
WAG	3E.				Males	Females	Totals	Males	Females	Totals	
Under \$5, .	. •	٠.			7,560	12,206	19,766	7,799	12,485	20,284	
\$5 but under \$	6,			.	4,927	8,806	13,733	5,050	8,865	13,915	
\$6 but under \$	7,			.	6,875	8,265	15,140	7,279	8,870	15,649	
\$7 but under \$	8,			٠.	5,269	6,409	11,678	5,526	6,806	12,332	
\$8 but under \$	9,			.	4,928	4,834	9,262	5,156	4,674	9,830	
\$9 but under \$1	.0,			.	3,520	1,648	5,168	3,514	1,499	5,013	
\$10 but under \$1	2,			.	4,236	596	4,832	4,338	574	4,912	
\$12 but under \$1	5,				2,227	63	2,290	2,300	51	2,351	
\$15 but under \$2	10,				1,038	8	1,041	1,033	1	1,034	
\$20 and over,					614	-	614	649	-	649	
TOTALS,					41,194	42,330	83,524	42,644	43,825	85,969	

COTTON, WOOLLEN, AND OTHER TEXTILES. [2 Establishments.]

			1 1			1	ı	
Under \$5,			51	110	161	59	119	178
\$5 but under \$6,			55	225	280	63	231	294
\$6 but under \$7,			222	324	546	258	845	603
\$7 but under \$8,			93	139	232	110	195	305
\$8 but under \$9,			111	83	194	162	91	253
\$9 but under \$10,			82	47	79	38	50	88
\$10 but under \$12,			153	16	169	158	20	178
\$12 but under \$15,			28	-	28	32		32
\$15 but under \$20,			12	-	12	11	-	11
\$20 and over, .			18	-	18	20	-	20
TOTALS, .	•	•	775	944	1,719	911	1,051	1,962

CRAYONS, PENCILS, CRUCIBLES, ETC. [4 Establishments.]

		1					
Under \$5,		1	20	21	-	-	-
\$5 but under \$6,		-	2	2	-	15	15
\$6 but under \$7,		-	4	4	2		2
\$7 but under \$8,		1	-	1	1	_	1
\$8 but under \$9,		5	-	5	1	-	1
\$9 but under \$10,		4	-	4	5	-	5
\$10 but under \$12,		6	-	6	9		9
\$12 but under \$15,		4	-	4	1	_	1
\$15 but under \$20,		-	-	-	2	-	2
\$20 and over,		1	_	1	1.	- 1	1
TOTALS, .		22	28	48	22	15	37
	 	 		<u> </u>	<u> </u>		

WAGES PAID: BY INDUSTRIES - Continued.

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES—1895, 1896 — Continued.

DRUGS AND MEDICINES. [27 Establishments.]

CLASSIFICATION O	r W	ERKL	Y		1895		1896			
Wage.				Males	Females	Totals	Males	Females	Totals	
Under \$5,				31	96	127	88	81	119	
\$5 but under \$6,				86	92	128	22	69	91	
\$6 but under \$7,				54	115	169	43	152	195	
\$7 but under \$8,				47	74	121	56	49	105	
\$8 but under \$9,				85	20	55	33	13	46	
\$9 but under \$10,				55	11	66	56	6	62	
\$10 but under \$12,				77	5	82	80	7	87	
\$12 but under \$15,				56	-	56	58	1	59	
\$15 but under \$20,			.	48	8	51	44	4	48	
\$20 and over, .				19	-	19	24	-	24	
Totals, .			.	458	416	874	454	382	836	

DYESTUFFS. [8 Establishments.]

Under \$5,		_	3	3	1	1	2
\$5 but under \$6,		2	2	4	-	2	2
\$6 but under \$7,		-	3	8	. 1	11	12
\$7 but under \$8,		12	6	18	13	2	15
\$8 but under \$9,		2	2	4	10	1	11
\$9 but under \$10,		82	-	82	52	-	52
\$10 but under \$12,		36	-	36	40	-	40
\$12 but under \$15,		22	1	23	23	-	23
\$15 but under \$20,		7	-	7	7	-	7
\$20 and over, .		1	-	1	1	-	1
TOTALS, .		164	17	181	148	17	165
			1		1		

EARTHEN, PLASTER, AND STONE WARE. [7 Establishments.]

			l .	l l	- 11	II		
Under \$5,			14	5	19	6	6	12
\$5 but under \$6,			21	5	26	12	13	25
\$6 but under \$7,			13	3	16	16	8	19
\$7 but under \$8,			12	-	12	18	2	20
\$8 but under \$9,			52	1	53	27	1	28
\$9 but under \$10,			36	-	36	25	-	25
\$10 but under \$12,			44	-	44	122	-	122
\$12 but under \$15,		.]	42	-	42	28	1	28
\$15 but under \$20,		.	46	-	46	33	- 1	83
\$20 and over, .			3	-	8	4	-	4
TOTALS, .			283	14	297	291	25	316

WAGES PAID: BY INDUSTRIES - Continued.

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES — 1895, 1896
— Continued.

ELECTRICAL APPARATUS AND APPLIANCES. [28 Establishments.]

CLASSIFICATION O	/RRKI	. T		1895		1896			
WAGE			_	Males	Females	Totals	Males	Females	Totals
Under \$5,				243	153	396	148	93	241
\$5 but under \$6,		•		80	69	149	84	65	149
\$6 but under \$7,				114	94	208	98	48	141
\$7 but under \$8,				165	47	212	155	56	211
\$8 but under \$9,				204	56	260	216	91	807
\$9 but under \$10,		•		259	68	322	175	24	199
\$10 but under \$12,				452	2	454	408	2	410
\$12 but under \$15,				747	2	749	724	2	726
\$15 but under \$20,				458	-	458	499	-	499
\$20 and over, .				104	-	104	96	-	96
TOTALS, .				2,826	486	8,312	2,598	381	2,979

ELECTROPLATING. [12 Establishments.]

Under \$5,			11	-	11	6	_	6
\$5 but under \$6,			8	1	9	7	1	8
\$6 but under \$7,			8	2	10	9	- 1	9
\$7 but under \$8,			8	1	9	9	-	9
\$8 but under \$9,			6	8	9	10	- 1	10
\$9 but under \$10,			24	-	24	29	2	31
\$10 but under \$12,			22	-	22	18	1	19
\$12 but under \$15,			27	- [27	31	-	31
\$15 but under \$20,			28	-	28	38	-	38
\$20 and over, .	•	•	9	-	9	16	-	16
Totals, .	•		151	7	158	178	4	177

EMERY AND SAND PAPER AND CLOTH, ETC. [10 Establishments.]

Under \$5,		5	-	5	17	-	17
\$5 but under \$6,		8	-	8	7	-	7
\$6 but under \$7,		8	-	8	8	-	8
\$7 but under \$8,		18	-	18	18	-,	13
\$8 but under \$9,		1	-	1	19	1	20
\$9 but under \$10,		61	1	62	60	-	.60
\$10 but under \$12,		115	1	116	138	-	138
\$12 but under \$15,		51	1	52	64	1	65
\$15 but under \$20,		38	-	38	48	- 1	48
\$20 and over, .		5	-	5	6	-	6
TOTALS, .		810	8	813	880	2	382
	 	 			<u> </u>	<u> </u>	<u> </u>

WWW.libtool.com.cn WAGES PAID: BY INDUSTRIES — Continued.

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES—1895, 1896 — Continued.

FANCY ARTICLES, ETC. [11 Establishments.]

CLASSIFICATION O	F W	KEKI	.Y		1895		1896			
WAGE.				Males	Females	Totals	Males	Females	Totals	
Under \$5,				13	106	119	16	81	97	
\$5 but under \$6,				6	41	47	7	46	58	
\$6 but under \$7,				10	34	44	8	56	64	
\$7 but under \$8,				6	25	31	5	35	40	
\$8 but under \$9,				7	15	22	6	5	11	
\$9 but under \$10,				11	7	18	12	8	20	
\$10 but under \$12,				13	8	21	19	4	23	
\$12 but under \$15,				26	1	27	27	3	30	
\$15 but under \$2 0,				16	2	18	15	-	15	
\$20 and over, .				4	-	4	2	-	2	
TOTALS, .				112	239	351	117	238	358	

FERTILIZERS. [3 Establishments.]

Under \$5,			 						
\$5 but under \$6,	Under \$5,			_		_	_	_	_
\$7 but under \$8, 2 - 2 \$8 but under \$9,	•			-	_	-	_	_	_
\$8 but under \$9,	\$6 but under \$7,			-	_	-	_	_	-
\$9 but under \$10, 1 - 1 1 - 1 \$10 but under \$12, 31 - 31 28 - 28 \$12 but under \$15, 9 - 9 11 - 11 \$15 but under \$20, 9 - 9 11 - 11 \$20 and over, 1 - 1 1 - 1	\$7 but under \$8,			-	-	· -	2	_	2
\$10 but under \$12, 31 - 31 28 - 28 \$12 but under \$15, 9 - 9 11 - 11 \$15 but under \$20, 9 - 9 11 - 11 \$20 and over, 1 - 1 1 - 1	\$8 but under \$9,			-	-	_	-	-	-
\$12 but under \$15, 9 - 9 11 - 11 \$15 but under \$20, 9 - 9 11 - 11 \$20 and over, 1 - 1 1 - 1	\$9 but under \$10,			1	-	1 .	1	-	1
\$15 but under \$20, 9 - 9 11 - 11 \$20 and over, 1 - 1 1 - 1	\$10 but under \$12,			31	-	31	28	-	28
\$20 and over,	\$12 but under \$15,			9	-	9 '	11	-	11
	\$15 but under \$20,			9	-	9	11	_	11
TOTALS,	\$20 and over, .		•	1	-	1	1	-	1
	Totals, .	•		51	-	51	54	-	54

FINE ARTS AND TAXIDERMY. [3 Establishments.]

				l'			
Under \$5,		-	-	- !	1	-	1
\$5 but under \$6,		1	-	1	1	1	2
\$6 but under \$7,		-	1	1	-	-	-
\$7 but under \$8,		-	-	- !	_	-	_
\$8 but under \$9,		1	-	1	-	-	-
\$9 but under \$10,		1	-	1	2	_	2
\$10 but under \$12,		8	-	8	. 3	_	3
\$12 but under \$15,		2	-	2	4	· -	4
\$15 but under \$20,		4	-	4	2		2
\$20 and over, .		1	-	1 '	1	-	1
Totals, .		13	1	14	14	1	15
	 	 · · · · · ·					<u> </u>

82 STATISTICS OF MANUFACTURES. [Pub. Doc. www.libtool.com.cn

WAGES PAID: BY INDUSTRIES - Continued.

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES—1895, 1896 — Continued.

FIREWORKS AND MATCHES. [4 Establishments.]

CLASSIFICATION O	r W	EBKI	Y		1895		1896			
Wage.			-	Males	Females	Totals	Males	Females	Totals	
Under \$5,				-	41	41	1	14	15	
\$5 but under \$6,			•.	14	9	23	8	26	34	
\$6 but under \$7,			.	2	5	7	10	5	15	
\$7 but under \$8,			.]	2	-	2	15	4	19	
\$8 but under \$9,			.]	9	-	9	7	-	7	
\$9 but under \$10,			.	10	2	12	12	1	13	
\$10 but under \$12,			.	19	-	19	8	-	8	
\$12 but under \$15,			.	7	_	7	5	-	5	
\$15 but under \$20,			.	10	-	10	7	-	7	
\$20 and over, .				3	_	3	6	-	6	
Totals, .				76	57	133	79	50	129	

FLAX, HEMP, JUTE, AND LINEN GOODS. [10 Establishments.]

Under \$5,			253	548	796	250	584	834
\$5 but under \$6,			133	431	564	105	410	515
\$6 but under \$7,		•	195	125	320	245	156	401
\$7 but under \$8,			115	28	143	130	40	170
\$8 but under \$9,			127	8	135	113	7	120
\$9 but under \$10,	•		115	-	115	100	8	103
\$10 but under \$12,			128	1	129	84	-	84
\$12 but under \$15,			83	-	83	83	-	83
\$15 but under \$20,			32	-	32	37	-	37
\$20 and over, .			4	-	4	5	-	5
Totals, .			1,185	1,136	2,321	1,152	1,200	2,352

FOOD PREPARATIONS. [319 Establishments.]

		- 1			11			
Under \$5,			228	1,472	1,700	303	1,429	1,732
\$5 but under \$6,		.	327	491	818	229	470	699
\$6 but under \$7,		.	410	440	850	393	435	828
\$7 but under \$8,		.	343	124	467	423	114	537
\$8 but under \$9,		.	904	51	955	977	68	1,045
\$9 but under \$10,			1,026	42	1,068	935	33	968
\$10 but under \$12,		.	1,001	33	1,034	951	27	978
\$12 but under \$15,		.	1,419	12	1,431	1,413	14	1,427
\$15 but under \$20,			660	6	666	609	5	614
\$20 and over, .			174	-	174	173		173
TOTALS, .		.	6,492	2,671	9,163	6,406	2,595	9,001

No. 36.] WAGES PAID.

WAGES PAID: BY INDUSTRIES — Continued.

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES — 1895, 1896 — Continued.

FURNITURE. [119 Establishments.]

CLASSIFICATION O	CLASSIFICATION OF WEEKLY						1896			
Wage.				Males	Females	Totals	Males Females Totals			
Under \$5,				124	95	219	174	96	270	
\$5 but under \$6,			.	144	74	218	129	64	193	
\$6 but under \$7,			.	152	90	242	169	77	246	
\$7 but under \$8,			.	831	94	425	844	117	461	
\$8 but under \$9,				400	40	440	815	35	350	
\$9 but under \$10,				582	32	614	473	13	486	
\$10 but under \$12,			.	608	10	618	589	12	601	
\$12 but under \$15,				794	6	800	712	6	718	
\$15 but under \$20,				556	1	557	502	-	502	
\$20 and over, .		•		91	-	91	94	-	94	
TOTALS, .				3,782	442	4,224	3,501	420	8,921	

GLASS. [14 Establishments.]

Under \$5,		52	8	55	66	3	71
\$5 but under \$6,		13	2	15	19	8	27
\$6 but under \$7,		52	15	67	29	5	84
\$7 but under \$8,		23	1	24	21	1	22
\$8 but under \$9,		37	-	37	12	_	12
\$9 but under \$10,		14	1	15	22	-	22
\$10 but under \$12,		47	-	47	50	-	50
\$12 but under \$15,		30	-	30	54	-	54
\$15 but under \$20 ,		96	-	96	86	-	86
\$20 and over, .		25	-	25	20	_	20
TOTALS, .		389	22	411	381	17	398
					1		

GLUE, ISINGLASS, AND STARCH. [23 Establishments.]

			[i	- 11	1		
Under \$5,			2	23	25	2	38	40
\$5 but under \$6,			11	6	17 ;	8	3	11
\$6 but under \$7,			43	- 1	43	45	4	49
\$7 but under \$8,			95	24	119	84	25	109
\$8 but under \$9,			86	7	93	75	8	78
\$9 but under \$10,			96	1	97	152	1	153
\$10 but under \$12,			111	-	111	128	2	130
\$12 but under \$15,			39	-	39	42	1	43
\$15 but under \$20,			16	-	16	21	-	21
\$20 and over, .		•	4	-	4	3	-	3
TOTALS, .		•	503	61	564	560	77	637
_	 				!!		1	

84 STATISTICS OF MANUFACTURES. [Pub. Doc. www.libtool.com.cn

WAGES PAID: BY INDUSTRIES - Continued.

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES—1895, 1896
— Continued.

HAIR WORK (ANIMAL AND HUMAN). [7 Establishments.]

CLASSIFICATION O	f W	ERKL	. Т		1895		1896			
WAGE.				Males	Females	Totals	Males	Females	Totals	
Under \$5,				11	34	45	10	32	42	
\$5 but under \$6,			.	1	38	39	1	32	33	
\$6 but under \$7,			.	-	7	7	4	7	11	
\$7 but under \$8,			.	3	1	4	7	2	9	
\$8 but under \$9,			.	7	4	11	20	3	23	
\$9 but under \$10,			.	24	2	26	20	2	22	
\$10 but under \$12,			.	17	2	19	6	2	8	
\$12 but under \$15,			.	6	1	7	3	1 1	4	
\$15 but under \$20,			.	4	_	4	3	_	3	
\$20 and over, .				1	_	1	-	-	_	
TOTALS, .				74	89	163	74	81	155	

HOSE: RUBBER, LINEN, ETC. [4 Establishments.]

Under \$5,		71	104	175	95	203	298
\$5 but under \$6,		52	29	81	50	59	109
\$6 but under \$7,		95	16	111	99	27	126
\$7 but under \$8,		106	9	115	137	12	149
\$8 but under \$9,		78	8	86	100	6	106
\$9 but under \$10,		72	6	78	103	6	109
\$10 but under \$12,		70	4	74	91	3	94
\$12 but under \$15,		73	-	73	78	-	78
\$15 but under \$20,		83	_	83	92	_	92
\$20 and over, .		16	-	16	18	-	18
Totals, .		716	176	892	863	316	1,179

HOSIERY AND KNIT GOODS. [42 Establishments.]

TOTALS,	•	•	•		2,463	4,033	6,496	1,965	4,488	6,453
20 and over,	•	•	٠	\cdot	57	-	57	45	-	45
15 but under (20,	•			82	1	83	98	4	102
12 but under	15,	•	•		188	19	207	155	22	177
310 but under \$	12,	•			298	61	359	223	81	304
\$9 but under \$	10,	•			195	139	334	150	122	272
\$8 but under	\$ 9,	•	•		229	285	514	166	276	442
\$7 but under	\$ 8,	•			267	580	847	225	530	755
\$6 but under	\$ 7,	•	•	.	401	720	1,121	351	719	1,070
\$5 but under	\$ 6,			•	220	806	1,026	163	874	1,037
Inder \$5, .	•	•	•	•	526	1,422	1,948	389	1,860	2,249

www.libtool.com.cn
WAGES PAID: BY INDUSTRIES — Continued.

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES -1895, 1896 - Continued.

INK, MUCILAGE, AND PASTE. [7 Establishments.]

CLASSIFICATION	OF	w	EEKL	Y		1895		1896			
WAG	î.				Males	Females	Totals	Males	Females	Totals	
Under \$5,					2	43	45	_	13	18	
\$5 but under \$6	,				3	5	8	4	6	10	
\$6 but under \$7	,			. 1	2	8	5	5	2	7	
\$7 but under \$8	,				11	2	13	2	1	8	
\$8 but under \$9	,				6	-	6	8	1	9	
\$9 but under \$10	, ,				6	1	7	6	1	7	
10 but under \$12	,				6	-	6	7	1	8	
\$12 but under \$15	, ,				3	-	8	4	-	4	
15 but under \$2 0	,				7	1	8	5	-	5	
20 and over, .					2	_	2	8	- 1	8	
Totals, .					48	55	103	44	25	69	

IVORY, BONE, SHELL, AND HORN GOODS, ETC. [18 Establishments.]

Under \$5,		50	54	104	40	55	. 95
\$5 but under \$6,	•	46	64	110	35	54	89
\$6 but under \$7,		61	45	106	42	53	95
\$7 but under \$8,		88	20	108	71	28	99
\$8 but under \$9,		109	2	111	76	3	79
\$9 but under \$10,		138	-	138	136	2	138
\$10 but under \$12,		192	1	193	161	1	162
\$12 but under \$15,		138	1	139	118	. 3	121
\$15 but under \$20,		34	-	34	43		43
\$20 and over, .		4	-	4	5	-	.5
TOTALS, .		860	187	1,047	727	199	926

LEATHER. [143 Establishments.]

	 	_						
Under \$5,			189	78	267	196	78	274
\$5 but under \$6,			155	49	204	216	50	266
\$6 but under \$7,			419	69	488	415	58	473
\$7 but under \$8,			651	48	699	639	63	702
\$8 but under \$9,			957	60	1,017	861	28	889
\$9 but under \$10,			1,891	23	1,914	1,799	10	1,809
\$10 but under \$12,			2,177	2	2,179	1,890	13	1,903
\$12 but under \$15,			1,080	3	1,083	1 046	2	1,048
\$15 but under \$20,		.	580	2	582	472	-	472
\$20 and over, .			123	-	123	125	-	125
TOTALS, .			8,222	334	8,556	7,659	302	7,961
		- 1	1	ı	11			

86 STATISTICS OF MANUFACTURES. [Pub. Doc.

WWW.libtcol company wages PAID: BY INDUSTRIES - Continued.

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES — 1895, 1896 — Continued.

LIQUORS AND BEVERAGES (NOT SPIRITUOUS). [28 Establishments.]

CLASSIFICATION	OF	w	REKL	Y		1895		1896			
₩AGI	ε.				Males	Females	Totals	Males	Females	Totals	
Under \$5,					5	2	7	6	8		
\$5 but under \$6					8	-	3	8	- 1		
\$6 but under \$7	,				16	1	17	15	-	1	
\$7 but under \$8	,				29	1	30	33	1 - 1	8:	
\$8 but under \$9	,				16	-	16	9	-	,	
\$9 but under \$10	,				49	-	49	34	-	3	
\$10 but under \$12	,				49	-	49	42	-	4:	
\$12 but under \$15	,				79	-	79	82	-	8:	
\$15 but under \$20	,				27	_	27	18	-	1	
\$20 and over, .					5	-	5	2	-	:	
TOTALS, .				•	278	4	282	244	3	24	

LIQUORS: MALT, DISTILLED, AND FERMENTED. [57 Establishments.]

							i i		
Under \$5, .				10	1	11	9	2	11
\$5 but under	\$ 6,			7	-	7	12	-	12
\$6 but under	\$ 7,			18	-	18	25	-	25
\$7 but under	\$8,			40	2	42	34	3	87
\$8 but under	\$ 9,			42	1	43	66	1	67
\$9 but under	\$ 10,		•	152	-	152	170	-	170
\$10 but under	\$ 12,			201	-	201	143	-	143
\$12 but under	\$ 15,			506	-	506	364	-	364
\$15 but under	\$ 20,			793	-	793	1,037	-	1,037
\$20 and over,				110	-	110	127	-	127
TOTALS,	•	•	•	1,879	4	1,883	1,987	6	1,993

LUMBER. [32 Establishments.]

					Ì		l f	[]	
Under \$5, .				14	-	14	25	1 8	28
\$5 but under	\$6,			7	4	11	12	1	13
\$6 but under	\$7,			28	5	83	57	. 5	62
\$7 but under	\$ 8,	•		98	-	98	74	-	74
\$8 but under	\$ 9,		. !	132	1	133	157	-	157
\$9 but under	\$10 ,			238	1	239	272	1	273
\$10 but under	\$12,	. •		191	1	192	147	1	148
\$12 but under	\$ 15,	•	•	154	-	154	127	-	127
\$15 but under	\$20 ,			108	-	108	100	-	100
\$20 and over,				22	-	22	27	-	27
TOTALS,				992	12	1,004	998	11	1,009

www.libtool.com.cn wages PAID: BY INDUSTRIES — Continued.

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES-1895, 1896 - Continued.

MACHINES AND MACHINERY. [371 Establishments.]

CLASSIFICATION O	F W	REKL	. Y		1895		1896			
Wage.				Males	Females	Totals	Males	Females	Totals	
Under \$5,				915	66	981	1,098	86	1,184	
\$5 but under \$6,			•	888	108	991	826	87	913	
\$6 but under \$7,				1,229	132	1,361	1,192	117	1,309	
\$7 but under \$8,				1,920	40	1,960	1,857	46	1,903	
\$8 but under \$9,				1,864	35	1,899	1,847	46	1,893	
\$9 but under \$10,				2,426	28	2,454	2,664	29	2,693	
\$10 but under \$12,				2,869	12	2,881	2,973	15	2,988	
\$12 but under \$15,			- 1	4,201	4	4,205	4,442	4	4,446	
\$15 but under \$20,				2,800	1	2,801	3,084	2	3,086	
\$20 and over, .				667	1	668	694	-	694	
Totals, .				19,774	427	20,201	20,677	432	21,109	

METALS AND METALLIC GOODS. [382 Establishments.]

				!					
				1,015	490	1,505	887	511	1,398
١,			- 1	633	512	1,145	645	501	1,146
,		•		1,052	346	1,398	971	364	1,335
,				1,115	183	1,298	1,157	148	1,305
١,				1,033	101	1,134	1,034	69	1,103
١,			.	2,075	55	2,130	2,120	48	2,168
,			.	2,260	46	2,306	2,124	44	2,168
,			.	2,937	17	2,954	2,788	7	2,795
١,				2,298	5	2,308	2,390	2	2,392
			. }	828	4	832	674	-	674
		•		15,246	1,759	17,005	14,790	1,694	16,484
	3, 3, 9, 9,	3, . 3, . 3, . 3, .	(,		6, 633 6, 1,052 6, 1,115 7, 1,033 8, 2,075 8, 2,280 9, 2,937 9, 2,298 828	3, . . 633 512 4, . . 1,052 346 3, . . 1,115 183 9, . . 1,033 101 9, . . 2,075 55 2, . . 2,280 46 3, . . 2,937 17 9, . . 2,298 5 . . . 828 4	3, 633 512 1,145 4, 1,052 346 1,398 5, 1,115 183 1,298 9, 1,033 101 1,134 9, 2,075 55 2,130 2, 2,260 46 2,306 3, 2,2937 17 2,954 9, 2,298 5 2,308 828 4 832	63 512 1,145 645 7 1,052 346 1,398 971 8 1,115 183 1,298 1,157 9 1,033 101 1,134 1,034 9 2,075 55 2,130 2,120 2 2,280 46 2,306 2,124 3 2,298 5 2,303 2,390 8 4 882 674	3, . . 633 512 1,145 645 501 4, . . 1,052 346 1,398 971 364 5, . . 1,115 183 1,298 1,157 148 6, . . 1,033 101 1,134 1,034 69 6, . 2,075 55 2,130 2,120 48 8, . 2,930 46 2,306 2,124 44 16, . 2,937 17 2,954 2,788 7 17, . . 2,298 5 2,303 2,390 2 18, . . . 828 4 832 674 -

MIXED TEXTILES. [12 Establishments.]

	 _							
Under \$5,			56	128	184	50	118	168
\$5 but under \$6,		.	45	37	82	29	49	78
\$6 but under \$7,		.	61	50	111	64	47	111
\$7 but under \$8,		.	164	21	185	176	18	194
\$8 but under \$9,		.	63	6	69	50	8	58
\$9 but under \$10,	• •	.	67	5	72	63	4	67
\$10 but under \$12,			39	2	41	31	1	32
\$12 but under \$15,		.	45	-	45	48	-	48
\$15 but under \$20,		.	16	-	16	29	-	29
\$20 and over, .		.	17	- 1	17	18	-	18
TOTALS, .			573	249	822	558	245	, 808
				ì		1		

88 STATISTICS OF MANUFACTURES. [Pub. Doc. www.libtool.com.cn

WAGES PAID: BY INDUSTRIES - Continued.

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES — 1895, 1896 — Continued.

MODELS, LASTS, AND PATTERNS. [49 Establishments.]

CLASSIFICATION O	r W	'KEKI	Y	•	1895		1896			
WAGE.				Males Females Totals		Totals	Males	Totai		
Under \$5,				10	_	10	26	1	2'	
\$5 but under \$6,				6	-	6	5	-		
\$6 but under \$7,			.	13	1	14	19	1	20	
\$7 but under \$8,				12	-	12	13	-	13	
\$8 but under \$9 ,			.	14	-	14	24	-	2	
\$9 but under \$10,				41	_	41	43	-	4:	
10 but under \$12,			. [44	-	44	50	-	50	
12 but under \$15,				102	-	102	126] -	120	
15 but under \$20,				169	-	169	154	_	15-	
20 and over, .		•		97	-	97	76	-	70	
TOTALS, .				508	1	509	536	2	53	

MUSICAL INSTRUMENTS AND MATERIALS. [65 Establishments.]

	 •	 				· · ·	
Under \$5,		67	35	102	69	35	104
\$5 but under \$6,		69	72	141	63	52	115
\$6 but under \$7,		83	11	94	95	11	106
\$7 but under \$8,		95	7	102	88	4	92
\$8 but under \$9,		101	2	103	90	2	92
\$9 but under \$10,		167	1	168	114	2	116
\$10 but under \$12,		238	3	241	248	3	251
\$12 but under \$15,		585	1	586	554	-	554
\$15 but under \$20,		735	-	735	635	-	635
\$20 and over, .		243	-	243	177	-	177
TOTALS, .		2,383	132	2,515	2,133	109	2,242

OILS AND ILLUMINATING FLUIDS. [9 Establishments.]

					- 1	11	i .		
				3	20	23	7	60	67
\$ 6,				2	2	4	1	-	1
\$ 7,				2	11	13	2	9	11
\$ 8,				3	-	3	20	-	20
\$ 9,				1	-	1	2	-	2
\$ 10,				11	-	11	19	- 1	19
\$ 12,				22	-	22	23	- 1	23
\$ 15,				36	-	36	23	-	23
\$ 20,				12	-	12	10	-	10
				-	-	-	2	-	2
				92	33	125	109	69	178
	\$7, \$8, \$9, \$10, \$12, \$15, \$20,	**************************************	\$7, \$8, \$9, \$10, \$12, \$15, \$20,	\$7,	\$6, 2 \$7, 2 \$8, 3 \$9, 1 \$10,	\$6, 2 2 \$7, 2 11 \$8, 3 - \$9, 1 - \$10, 11 - \$12, 22 - \$15, 36 - \$20,	\$6, 2 2 4 \$7, 2 11 13 \$8, 3 - 3 \$9, 1 - 1 \$10, 11 - 11 \$12, 22 - 22 \$15, 36 - 36 \$20, 12 - 12	\$6, . . 2 2 4 1 \$7, . . 2 11 13 2 \$8, . . 3 - 3 20 \$9, . . 1 - 1 2 \$10, . . 11 - 11 19 \$12, .	\$6, . . 2 2 4 1 - \$7, . . 2 11 13 2 9 \$8, . . 3 - 3 20 - \$9, . . 1 - 1 2 - \$10, . . 11 - 11 19 - \$12, .

WAGES PAID: BY INDUSTRIES - Continued.

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES-1895, 1896 - Continued.

PAINTS, COLORS, AND CRUDE CHEMICALS. [28 Establishments.]

CLASSIFICATION O	r V	VEEKI	.x		1895		1896			
Wagr.			_	Males	Females	Totals	Males	Females	Totals	
Under \$5,				2	4	6	2	8	ŧ	
\$5 but under \$6,				3	8	11	5	5	10	
\$6 but under \$7,				9	4	13	5	-	5	
\$7 but under \$8,				7	6	13	10	6	16	
\$8 but under \$9,				24	1	25	16	-	16	
\$9 but under \$10,				63	1	64	54	1	55	
\$10 but under \$12,				52	1	53	51	2	58	
\$12 but under \$15,				57	1	58	54	1	55	
\$15 but under \$20,				16	-	16	22	-	22	
20 and over, .				13	-	13	13	-	18	
Totals, .				246	26	272	232	18	250	

PAPER AND PAPER GOODS. [123 Establishments.]

		- 1			l i			
Under \$5,			231	1,546	1,777	232	1,396	1,628
\$5 but under \$6,		.	172	1,504	1,676	186	1,378	. 1,564
\$6 but under \$7,		.	372	1,492	1,864	345	1,577	1,922
\$7 but under \$8,		.	754	631	1,385	648	596	1,244
\$8 but under \$9,			760	333	1,093	721	273	994
\$9 but under \$10,			1,424	196	1,620	1,448	138	1,586
\$10 but under \$12,		.	940	72	1,012	955	48	1,003
\$12 but under \$15,		. !	1,104	17	1,121	1,065	16	1,081
\$15 but under \$20,		.	788	9	797	787	7	794
\$20 and over, .		.	204	1	205	208	_	208
TOTALS, .			6,749	5,801	12,550	6,595	5,429	12,024

PERFUMES, TOILET ARTICLES, ETC. [4 Establishments.]

2		
	1	3
2	7	9
-	2	2
1	2	3
2	2	4
-	1	1
1	-	1
2	-	2
1	-	1
2	-	2
13	15	28
	1 2	1 - 2 -

90 STATISTICS OF MANUFACTURES. [Pub. Doc.

WWW.libtool.com.cn WAGES PAID: BY INDUSTRIES — Continued.

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES — 1895, 1896 — Continued.

PHOTOGRAPHS AND PHOTOGRAPHIC MATERIALS. [24 Establishments.]

CLASSIFICATION) F	Wı	erki.			1895		1896			
WAGE				_	Males	Males Females		Males	Females	Totals	
Under \$5,		•			69	113	182	58	121	179	
\$5 but under \$6				.	18	17	35	9	19	28	
\$6 but under \$7				.	24	26	50	28	36	64	
\$7 but under \$8,					20	19	39	24	13	37	
\$8 but under \$9				.	17	15	32	19	20	39	
\$9 but under \$10,				.	29	16	45	33	16	49	
\$10 but under \$12					34	9	43	43	10	53	
\$12 but under \$15					49	11	60	54	6	60	
\$15 but under \$2 0				.	65	5	70	61	4	65	
\$20 and over, .					41	4	45	81	2	33	
TOTALS, .					366	235	601	360	247	607	

POLISHES AND DRESSING. [33 Establishments.]

Under \$5,		12	73	85	8	82	85
\$5 but under \$6,		8	19	27	6	16	22
\$6 but under \$7,		4	30	34	3	48	51
\$7 but under \$8,		9	9	18	8	14	22
\$8 but under \$9,		9	7	16	5	10	15
\$9 but under \$10,		12	28	40	7	9	16
\$10 but under \$12,		24	10	84	40	19	59
\$12 but under \$15,		56	-	56	46	8	54
\$15 but under \$20,		39	_	39	25	1	26
\$20 and over, .		25	-	25	22	-	22
TOTALS, .		198	176	374	165	207	372

PRINTING, PUBLISHING, AND BOOKBINDING. [47 Establishments.]

		- 1			11	1	1	
Under \$5,			226	257	483	190	290	480
\$5 but under \$6,			89	129	218	97	116	213
\$6 but under \$7,		.	91	181	272	96	135	231
\$7 but under \$8,		.	67	146	218	64	147	211
\$8 but under \$9,		.	93	104	197	77	80	157
\$9 but under \$10,		.	90	65	155	102	67	169
\$10 but under \$12,			217	70	287	222	. 66	288
\$12 but under \$15,		.	303	23	326	297	37	834
\$15 but under \$20,		.	386	11	397	373	11	384
\$20 and over, .		.	303	2	305	283	2	285
TOTALS, .			1,865	988	2,853	1,801	951	2,752
		- 1	i			i	1	

WWW.libtool.com.cn WAGES PAID: BY INDUSTRIES — Continued.

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES — 1895, 1896 — Continued.

PRINT WORKS, DYE WORKS, AND BLEACHERIES. [47 Establishments.]

CLASSIFICATION ()F '	Werk	LY		1895		1896			
WAGE				Males	Females	Totals	Males	Females	Totals	
Under \$5,				615	294	909	618	373	991	
\$5 but under \$6,				399	464	863	397	505	902	
\$6 but under \$7,				695	383	1,078	804	364	1,168	
\$7 but under \$8,				1,332	110	1,442	1,348	104	1,452	
\$8 but under \$9,				679	68	747	705	30	735	
\$9 but under \$10,				598	38	636	531	52	583	
\$10 but under \$12,				564	7	571	460	9	469	
\$12 but under \$15,				316	8	819	331	2	333	
\$15 but under \$20,				169	-	169	183	1	184	
\$20 and over, .				254	-	254	274	-	274	
TOTALS, .				5,621	1,367	6,988	5,651	1,440	7,091	

RAILROAD CONSTRUCTION AND EQUIPMENT. [16 Establishments.]

			- 1	i		1	1 1		
Under \$5, .				8	-	8	5	-	5
\$5 but under	\$ 6,		.	8	-	8	33	-	88
\$6 but under	\$ 7,		.	24	- 1	24	28	-	28
\$7 but under	\$ 8,		.	74	-	74	95	-	95
\$8 but under	\$ 9,		.	221	-	221	356	-	356
\$9 but under	\$ 10,			420	-	420	555	-	555
\$10 but under	\$12 ,			568	-	568	613	-	613
\$12 but under	\$ 15,		.	1,096	-	1,096	1,322	-	1,322
\$15 but under	\$2 0,			407	-	407	400	-	400
\$20 and over,				46	-	46	35	-	35
Totals,		•		2,872	-	2,872	3,442	-	3,442

RUBBER AND ELASTIC GOODS. [41 Establishments.]

TOTALS,					5,432	4,161	9,593	5,103	3,839	8,942
\$20 and over,	•	•	•		132	1	133	126	1	127
\$15 but under	\$ 20,		•	• [707	16	723	595	10	605
\$12 but under	\$ 15,				907	133	1,040	968	. 89	1,057
\$10 but under	\$ 12,				764	477	1,241	758	288	1,041
\$9 but under	\$ 10,				1,041	582	1,623	1,064	635	1,699
\$8 but under	\$ 9,				754	570	1,324	626	539	1,165
\$7 but under	\$ 8,				393	642	1,035	377	682	1,059
\$6 but under	\$ 7,				197	483	680	192	525	717
\$5 but under	\$ 6,			.	219	418	637	157	390	547
Under \$5, .	•	•			318	839	1,157	245	680	925

92 STATISTICS OF MANUFACTURES. [Pub. Doc. www.libtool.com.cn

WAGES PAID: BY INDUSTRIES - Continued.

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES — 1895, 1896
— Continued.

SADDLERY AND HARNESS. [41 Establishments.]

CLASSIFICATION O	p W	KEKL	, I		1895		1896			
WAGE.				Males	Females	Totals	Males	Females	Totals	
Under \$5,				8	13	21	6	14	20	
\$5 but under \$6,				10	14	24	2	13	15	
\$6 but under \$7,			.	10	17	27	4	24	28	
\$7 but under \$8,			.	14	81	45	23	29	52	
\$8 but under \$9,			.	24	14	38	21	11	32	
\$9 but under \$10,			.	44	9	53	43	12	55	
\$10 but under \$12,			.]	78	7	85	98	8	106	
\$12 but under \$15,			.	113	3	116	66	1	67	
\$15 but under \$20,				57	_	57	57	-	57	
\$20 and over, .				10	-	10	8	-	8	
TOTALS, .				368	108	476	328	112	440	

SCIENTIFIC INSTRUMENTS AND APPLIANCES. [20 Establishments.]

Under \$5,		44	12	56	55	16	71
\$5 but under \$6,		22	26	48	19	16	35
\$6 but under \$7,		21	13	34	28	16	44
\$7 but under \$8,		14	4	18	22	5	27
\$8 but under \$9,		19	3	. 22	29	3	32
\$9 but under \$10,		43	5	48	40	8	43
\$10 but under \$12,		36	_	36	41	3	44
\$12 but under \$15,		80	-	80	59	1	60
\$15 but under \$20,		73	-	73	77	-	77
\$20 and over, .		24	-	24	41	-	41
TOTALS, .		376	63	439	411	63	474

SHIPBUILDING. [51 Establishments.]

	1		1			
	147	-	147	100	-	100
٠.	21	-	21	20	-	20
	22	-	22	13	-	13
	22	-	22	14	-	14
	27	-	27	29	-	29
	62	-	62	33	-	83
	60	_	60	61	-	61
	188	-	188	215	-	215
	235	-	235	303	-	303
	42	_ {	42	22	- 1	22
	826	-	826	810	-	810
		21 22	21	21 - 21 22 - 22 22 - 22 27 - 27 62 - 62 60 - 60		

WAGES PAID: BY INDUSTRIES - Continued.

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES—1895, 1896 — Continued.

SILK AND SILK GOODS. [9 Establishments.]

CLASSIFICATION O	F W	'EKKL	y		1895		1896			
WAGE.	WAGE.				Females	Totals	Males	Females	Totals	
Under \$5,				87	276	313	51	266	817	
\$5 but under \$6,				78	365	443	57	330	887	
\$6 but under \$7,			.	67	288	355	92	290	382	
\$7 but under \$8,				74	136	210	59	117	176	
\$8 but under \$9,				62	79	141	51	81	132	
\$9 but under \$10,				61	66	127	67	77	144	
\$10 but under \$12,			.	116	66	182	136	62	198	
\$12 but under \$15,			.	86	36	122	77	8	85	
\$15 but under \$20,				59	6	65	55	_	55	
\$20 and over, .				22	-	22	22	- 1	22	
Totals, .				662	1,318	1,980	667	1,231	1,898	

SPORTING AND ATHLETIC GOODS. [9 Establishments.]

46 42	30	76	71	32	
40	T I		14	82	103
44	7	49	45	9	54
46	14	60	68	8	76
123	7	130	92	11	103
37	2	39	48	5	53
96	-	96	98	1	94
96	-	96	114	-	114
139	-	139	121	-	121
55	-	55	68	-	68
6	-	6	8	-	8
686	60	746	728	66	794
	123 37 96 96 139 55 6	123 7 37 2 96 - 96 - 139 - 55 - 6 -	123 7 130 37 2 39 96 - 96 96 - 96 139 - 139 55 - 55 6 - 6	123 7 130 92 37 2 39 48 96 - 96 93 96 - 96 114 139 - 139 121 55 - 55 68 6 - 6 8	123 7 130 92 11 37 2 39 48 5 96 - 96 98 1 96 - 96 114 - 139 - 139 121 - 55 - 55 68 - 6 - 6 8 -

STONE. [199 Establishments.]

	_	 						
Under \$5,			222	-	222	155	-	155
\$5 but under \$6,		.	143	-	143	164	-	164
\$6 but under \$7,		.	215	-	215	250	-	250
\$7 but under \$8,			360	-	360	370	-	270
\$8 but under \$9,			343	-	343	439	-	439
\$9 but under \$10,			1,219	-	1,219	1,089	-	1,089
\$10 but under \$12,			1,268	-	1,268	1,316	-	1,316
\$12 but under \$15,			1,274	-	1,274	1,241	-	1,241
\$15 but under \$20,			1,692	-	1,692	1,756	-	1,756
\$2 0 and over, .		.	181	-	181	248	-	248
TOTALS, .			6,917	-	6,917	7,028	-	7,028

94 STATISTICS OF MANUFACTURES. [Pub. Doc. www.libfool.com.cn

WAGES PAID: BY INDUSTRIES - Continued.

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES—1895, 1896 — Continued.

STRAW AND PALM LEAF GOODS. [21 Establishments.]

CLASSIFICATION O	, w	RKKI.			1895		1896			
WAGE.				Males	Females	Totals	Males	Females	Totals	
Under \$5,				28	186	214	27	335	362	
\$5 but under \$6,				18	321	339	48	269	317	
\$6 but under \$7,			.	86	318	899	105	376	481	
\$7 but under \$8,			.	158	452	610	155	435	590	
\$8 but under \$9,				107	368	475	176	339	515	
\$9 but under \$10,				325	410	735	317	446	763	
\$10 but under \$12,				295	343	638	190	262	452	
\$12 but under \$15,				304	257	561	233	204	437	
\$15 but under \$20,				160	58	218	165	55	220	
\$20 and over, .				28	10	38	29	7	36	
TOTALS, .				1,509	2,718	4,227	1,445	2,728	4,173	

TALLOW, CANDLES, SOAP, AND GREASE. [60 Establishments.]

Under \$5, .			23	76	99	18	65	83
\$5 but under	\$ 6,		12	11	23	10	12	22
\$6 but under	\$7,		10	5	15	12	11	23
\$7 but under	\$8,		29	8	32	34	6	40
\$8 but under	\$ 9,		33	8	36	15	-	15
\$9 but under	\$ 10,		136	_	136	139	-	139
\$10 but under	\$ 12,		162	1	163	159	1	160
\$12 but under	\$ 15,		100	-	100	105	-	105
\$15 but under	\$20,		54	-	54	56	-	56
\$20 and over,	•		11	-	11	12	-	12
Totals,			570	99	669	560	95	655

TOBACCO, SNUFF, AND CIGARS. [48 Establishments.]

				1	11	1	1	
Under \$5,			51	179	230	47	95	142
\$5 but under \$6,		.	19	73	92	22	104	126
\$6 but under \$7,			18	108	126	13	139	152
\$7 but under \$8,			16	80	96	12	56	68
\$8 but under \$9,			13	24	37	20	23	43
\$9 but under \$10,			46	20	66	33	13	46
\$10 but under \$12,			90	29	119	107	22	129
\$12 but under \$15,			275	39	814	294	39	333
\$15 but under \$20,			516	8	524	484	6	490
\$20 and over, .			277	2	279	253	2	255
TOTALS, .	•		1,821	562	1,883	1,285	499	1,784
	 		l					

WAGES PAID: BY INDUSTRIES - Continued.

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES—1895, 1896 — Continued.

TOYS AND GAMES (CHILDREN'S). [11 Establishments.]

CLASSIFICATION O	y W	ERKL	. T		1895		1896			
WAGE.	Wage.				Females	Totals	Males	Females	Totals	
Under \$5,				54	56	110	42	80	122	
\$5 but under \$6,				41	25	66	42	15	57	
\$6 but under \$7,				45	25	70	46	24	70	
\$7 but under \$8,				78	14	92	61	17	78	
\$8 but under \$9,			.	41	11	52	53	14	67	
\$9 but under \$10,			.	59	5	64	54	4	58	
\$10 but under \$12,			.	51	2	53	52	3	55	
\$12 but under \$15,			.	29	-	29	89	- 1	39	
\$15 but under \$20,			.	18	_	18	13	-	13	
\$20 and over, .				8	-	8	10	-	10	
Totals, .			.	424	138	562	412	157	569	

TRUNKS AND VALISES. [7 Establishments.]

						l	[[1		
Under \$5, .				•	22	8	25	7	-	7
\$5 but under	\$ 6,				-	3	3	8	4	7
\$6 but under	\$7,				2	5	7	2	3	5
\$7 but under	\$ 8,				6	-	6	8	-	8
\$8 but under	\$ 9,				1	_	1	1	-	1
\$9 but under	\$ 10,		•		9	_	9	13	-	13
\$10 but under	\$ 12,				17	1	18	14	1	15
\$12 but under	\$ 15,				23	-	23	15	-	15
\$15 but under	\$2 0,				18	-	18	15	-	15
\$20 and over,					1	-	1	1	-	1
TOTALS,		•			99	12	111	79	8	87

WHIPS, LASHES, AND STOCKS. [15 Establishments.]

•			l		1	1		
Under \$5,			29	22	51	23	12	35
\$5 but under \$6,			8	11	19	22	43	65
\$6 but under \$7,			27	52	79	10	29	39
\$7 but under \$8,			19	26	45	33	18	51
\$8 but under \$9,			15	10	25	50	11	61
\$9 but under \$10,			61	8	69	27	4	31
\$10 but under \$12,			38	1	39	47	-	47
\$12 but under \$15,			58	-	58	81	_	81
\$15 but under \$20,		٠.	31	-	31	18	-	18
\$20 and over, .			7	-	7	5	-	5
Totals, .			293	130	423	266	117	383

WWW.libtool.com.cn WAGES PAID: BY INDUSTRIES — Continued.

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES - 1895. 1896 - Continued.

WOODEN GOODS. [153 Establishments.]

CLASSIFICATION O	r W	KRKT.			1895		1896			
	Wage.					Totals	Males	Females	Totals	
Under \$5,				132	23	155	125	14	139	
\$5 but under \$6,			.	103	11	114	77	10	87	
\$6 but under \$7,			.	135	10	145	125	14	139	
\$7 but under \$8,			.	293	9	302	214	6	220	
\$8 but under \$9,			.	236	5	241	299	6	305	
\$9 but under \$10,				524	3	527	470	2	472	
\$10 but under \$12,			.	359	4	363	368	5	373	
\$12 but under \$15,				706	2	708	670	2	672	
\$15 but under \$20,				645	1	646	593	8	601	
\$20 and over, .				117	2	119	89	4	93	
Totals, .				3,250	70	3,320	3,030	71	3,101	

WOOLLEN GOODS. [122 Establishments.]

		1,180	1,876	3,056	1,033	1,641	2,674
	.	850	1,042	1,892	810	1,068	1,878
	.	1,907	1,054	2,961	1,864	1,103	2,967
	.	1,895	1,058	2,953	1,959	1,153	3,112
	.	1,361	668	2,029	1,295	539	1,834
		1,375	389	1,764	1,435	320	1,755
	.	1,282	204	1,486	1,098	179	1,277
	.	781	56	837	783	49	832
		355	-	355	394	1	395
		183	-	183	168	-	168
		11,169	6,347	17,516	10,839	6,053	16,892
	· · · · · · · · · · · · · · · · · · ·			850 1,042 1,907 1,054 1,895 1,058 1,361 668 1,375 389 1,282 204 781 56 355 - 183 -	850	850 1,042 1,892 810 1,907 1,054 2,961 1,864 1,895 1,058 2,953 1,959 1,361 668 2,029 1,295 1,375 389 1,764 1,435 1,282 204 1,486 1,098 781 56 837 783 355 - 355 394 183 - 183 168	

WORSTED GOODS. [27 Establishments.]

		1			- 11			
Under \$5,		.	780	1,912	2,692	764	1,783	2,547
\$5 but under \$6,		.	717	1,600	2,317	749	1,905	2,654
\$6 but under \$7,			1,054	1,503	2,557	1,158	1,483	2,641
\$7 but under \$8,		.	1,275	683	1,958	1,257	614	1,871
\$8 but under \$9,		.	543	307	850	579	339	918
\$9 but under \$10,		.	714	162	876	681	232	913
\$10 but under \$12,			863	154	1,017	1,023	163	1,186
\$12 but under \$15,		.	729	24	753	672	24	696
\$15 but under \$20,		.	165	4	169	176	3	179
\$20 and over, .			94	1	95	102	2	104
Totals, .			6,934	6,350	13,284	7,161	6,548	13,709

WAGES PAID: BY INDUSTRIES - Concluded.

CLASSIFIED WEEKLY WAGES: BY INDUSTRIES — 1895, 1896 — Concluded.

ALL INDUSTRIES. [4,609 Establishments.]

CLASSIFICATION O	. W	BEKL	,		1895		1896			
Wage.				Males	Females	Totals	Males	Females	Totals	
Under \$5,	•			19,621	31,780	51,401	19,203	81,763	50,966	
\$5 but under \$6,			٠.	13,282	22,575	35,857	13,170	22,684	35,854	
\$6 but under \$7,				20,046	21,751	41,797	20,601	21,706	42,307	
\$7 but under \$8,			. 1	22,846	15,727	38,073	22,304	16,309	38,613	
\$8 but under \$9,				21,411	10,611	32,022	22,201	10,982	33,183	
\$9 but under \$10,				28,858	6,955	35,813	28,855	6,716	85,571	
\$10 but under \$12,				82,974	5,010	37,984	32,426	5,005	87,431	
\$12 but under \$15,				87,593	2,538	40,131	37,201	2,364	39,565	
\$15 but under \$20,				28,460	735	29,195	28,538	814	29,352	
\$20 and over, .		•	•	9,285	74	9,359	9,064	96	9,160	
TOTALS, .				233,876	117,756	351,632	233,563	118,439	352,002	

PROPORTION OF BUSINESS DONE

AND

DAYS IN OPERATION:

BY INDUSTRIES.

[99]

PROPORTION OF BUSINESS DONE: BY INDUSTRIES.

1895, 1896.

[The figures given in this presentation represent the average proportion of business done by each establishment in the industries considered. Greatest capacity, or maximum production, has been considered as 100 per cent, and the percentages given indicate the average proportion of business done by each establishment during each year on the basis stated. Comparison is made between 1895 and 1896, and the relative increase or decrease in 1896 as compared with 1895 is given with its equivalent percentage.]

Industries.	Number of Estab- lishments	POR	BE PRO- TION , ESS DONE	INCREASE (+), OR DECREASE (-), IN 1896	
	Con- sidered	1895	1896	Proportion	Percent- ages
Agricultural implements,	8	60.00	60.38	+0.38	+0.63
Arms and ammunition,	12	51.67	54.25	+2.58	+4.99
Artisans' tools,	69	56.01	52.48	-3.53	-6.30
Awnings, sails, tents, etc.,	32	41.69	40.78	-0.91	-2.18
Bicycles, tricycles, etc.,	10	67.80	57.70	-10.10	-14.90
Boots and shoes,	605	62.04	58.61	-3.43	-5.53
Boxes (paper and wooden),	158	61.91	59.86	-2.05	-3.31
Brick, tiles, and sewer pipe,	56	64.52	67.18	+2.66	+4.12
Brooms, brushes, and mops,	19	64.42	59.42	-5.00	-7.76
Burial cases, caskets, coffins, etc.,	7	73.14	67.14	-6.00	-8.20
Buttons and dress trimmings,	15	48.67	42.13	-6.54	-13.44
Carpetings,	12	73.50	68.25	-5.25	-7.14
Carriages and wagons,	143	60.23	56.43	-3.80	-6.31
Cement, kaolin, lime, and plaster,	10	60.00	59.70	-0.30	-0.50
Chemical preparations (compounded), .	12	61.33	53.50	—7.83	-12.77
Clocks, watches, and jewelry,	99	58.36	52.15	-6.21	-10.64
Clothing,	130	64.03	59.94	-4.09	-6.39
Cooking, lighting, and heating apparatus,	35	67.37	64.51	-2.86	-4.25
Cordage and twine,	29	64.17	65.86	+1.69	+2.63
Corks, bungs, and taps,	3	46.67	55.00	+8.33	+17.85
Cotton goods,	169	87.22	77.38	-9.89	-11.34
Cotton, woollen, and other textiles,	2	94.50	67.00	-27.50	-29.10
Crayons, pencils, crucibles, etc.,	4	56.25	43.75	-12.50	-22.22
Drugs and medicines,	27	55.56	50.93	-4.63	-8.33
Dyestuffs,	8	59.88	45.25	-14.63	-24.43
Earthen, plaster, and stone ware,	7	56.29	58.71	+2.42	+4.30
Electrical apparatus and appliances	23	64.04	65.70	+1.66	+2.59
Electroplating,	12	55.33	51.67	-3.66	-6.61
Emery and sand paper and cloth, etc.,	10	65.70	61.30	-4.40	-6.70
Fancy articles, etc.,	11	55.45	56.82	+1.37	+2.47
Fertilizers,	3	58.33	56.67	-1.66	-2.85

No. 36.] PROPORTION OF BUSINESS DONE, ETC. 101 www.libtool.com.cn

PROPORTION OF BUSINESS DONE: BY INDUSTRIES — 1895, 1896 — Concluded.

•	Number of Estab-	POR	GE PRO- TION ESS DONE	Increase (+), or Decrease (-), in 1896		
Industries.	lishments Con- sidered	1895	1896	Proportion	Percent-	
Fine arts and taxidermy,	3	69.33	75.00	+5.67	+8.18	
Fireworks and matches,	4	62.75	65.00	+2.25	+3.59	
Flax, hemp, jute, and linen goods,	10	70.90	73.70	+2.80	+3.95	
Food preparations,	319	61.46	60.71	-0.75	-1.22	
Furniture,	119	58.13	55.29	-2.84	-4.89	
Glass.	14	59.86	49.43	-10.43	-17.42	
Glue, isinglass, and starch.	23	61.00	64.09	+3.09	+5.07	
Hair work (animal and human).	7	54.86	49.29	-5.57	-10.15	
Hose: rubber, linen, etc., .	4	64.50	60.00	-3.57 -4.50	-6.98	
771	42	1		Į.		
Ink, mucilage, and paste,		62.86	57.26	-5.60	-8.91	
	7	49.71	49.71	*-	*_	
Ivory, bone, shell, and horn goods, etc., .	18	67.56	61.44	-6.12	-9.06	
Leather,	143	66.51	58.35	-8.16	-12.27	
Liquors and beverages (not spirituous), .	28	56.11	51.39	-4.72	-8.41	
Liquors: malt, distilled, and fermented,.	. 57	56.98	58.02	+1.04	+1.83	
Lumber,	82	63.06	56.88	-6.18	9.80	
Machines and machinery,	871	59.08	56.78	-2.30	-3.89	
Metals and metallic goods,	382	61.90	59.10	-2.80	-4.52	
Mixed textiles,	12	73.58	63.42	-10.16	-13.81	
Models, lasts, and patterns,	49	56.53	54.4 3	-2.10	-3.71	
Musical instruments and materials,	65	58.14	53.77	-4.37	-7.52	
Oils and illuminating fluids,	9	61.11	59.44	-1.67	-2.78	
Paints, colors, and crude chemicals, .	23	59.09	55.35	-3.74	-6.33	
Paper and paper goods,	123	73.96	70.77	-3.19	-4.31	
Perfumes, toilet articles, etc.,	4	57.50	50.00	7.50	-13.04	
Photographs and photographic materials,	24	57.17	56.00	-1.17	-2.05	
Polishes and dressing,	33	56.45	53.06	-3.39	-6.01	
Printing, publishing, and bookbinding, .	47	65.47	65.64	+0.17	+0.26	
Print works, dye works, and bleacheries,	47	64.47	59.98	-4.49	-6.96	
Railroad construction and equipment, .	16	73.94	80.88	+6.94	+9.39	
Rubber and elastic goods,	41	68.59	61.44	-7.15	-10.42	
Saddlery and harness,	41	50.78	51.22	+0.44	+0.87	
Scientific instruments and appliances, .	20	67.75	64.50	-3.25	-4.80	
Shipbuilding,	51	41.63	43.12	+1.49	+3.58	
Silk and silk goods,	9	59.78	54.78	-5.00	-8.36	
Sporting and athletic goods,	9	51.11	45.56	5.55	-10.86	
Stone,	199	54.93	53.17	-1.76	-3.20	
Straw and palm leaf goods,	21	70.76	70.83	-0.43	-0.61	
Tallow, candles, soap, and grease,	60	58.23	53.80	-4.43	-7.61	
Tobacco, snuff, and cigars,	48	56.46	54.06	-2.40	-4.25	
Toys and games (children's),	11	59.64	57.27	-2.37	-3.97	
Trunks and valises,	7	70.71	54.86	-15.85	-22.42	
Whips, lashes, and stocks,	15	71.78	54.53	-17.20	-23.98	
Wooden goods,	153	59.32	55.20	-4.12	—6.95	
Woollen goods,	122	82.81	69.50	-13.31	-16.07	
Worsted goods,	27	85.56	70.30	-15.26	-17.84	
·						
ALL INDUSTRIES,	4,609	62.56	58.98	-3.58	-5.72	

DAYS IN OPERATION: BY INDUSTRIES.

1895, 1896,

[The figures given in this presentation represent the average number of days each person was employed in the industries considered during the years 1895 and 1896. The average number of days in operation is based upon the average number of persons employed, the number of days per establishment being multiplied by the figures representing the average number of persons, and the sum divided by the aggregate average number of persons, an average for each industry and for All Industries being thus obtained. Comparison is made between 1895 and 1896, and the relative increase or decrease in 1896 as compared with 1896 is given with its equivalent percentage.]

Industries.	Number of Estab- lishments	OF I	NUMBER DAYS RATION	Increase (+), or Decrease (-), in 1896	
	Con- sidered	1895	1896	Days	Percent-
Agricultural implements,	8	281.46	277.27	-4.19	-1.49
Arms and ammunition,	12	289.29	293.81	+4.52	+1.56
Artisans' tools,	69	282.91	282.68	-0.23	-0.08
Awnings, sails, tents, etc.,	32	288.45	288.23	-0.22	-0.08
Bicycles, tricycles, etc.,	10	298.11	296.86	-1.25	-0.42
Boots and shoes,	605	284.64	282.80	-2.34	-0.82
Boxes (paper and wooden),	158	284.71	277.05	—7.66	-2.69
Brick, tiles, and sewer pipe,	56	212.80	227.26	+14.46	+6.80
Brooms, brushes, and mops,	19	263.67	252.30	-11.37	-4.31
Burial cases, caskets, coffins, etc.,	7	299.92	298.72	-1.20	-0.40
Buttons and dress trimmings,	15	266.35	252.53	-13.82	5.19
Carpetings,	12	299.63	241.14	-58.49	-19.52
Carriages and wagons,	143	288.90	278.03	-10.87	-3.76
Cement, kaolin, lime, and plaster,	10	281.33	291.98	+10.65	+3.79
Chemical preparations (compounded), .	12	300.43	294.11	-6.32	-2.10
Clocks, watches, and jewelry,	99	277.59	261.38	-16.21	-5.84
Clothing,	130	290.25	278.13	-12.12	-4.18
Cooking, lighting, and heating apparatus,	85	258.66	261.78	+3.12	+1.21
Cordage and twine,	29	286.40	281.48	-4.92	-1.72
Corks, bungs, and taps,	8	285.22	279.65	-5.57	-1.95
Cotton goods,	169	297.36	279.53	-17.83	-6.00
Cotton, woollen, and other textiles,	2	301.48	286.98	-14.50	-4.81
Crayons, pencils, crucibles, etc.,	4	239.41	234.36	-5.05	-2.11
Drugs and medicines,	27	297.78	299.73	+1.95	+0.65
Dyestuffs,	8	278.80	229.36	-49.44	-17.73
Earthen, plaster, and stone ware,	7	297.56	268.21	-29.35	-9.86
Electrical apparatus and appliances, .	23	300.12	298.78	-1.34	-0.45
Electroplating,	12	283.58	288.32	+4.74	+1.67
Emery and sand paper and cloth, etc., .	. 10	297.90	295.89	-2.01	-0.67
Fancy articles, etc.,	11	290.22	282.62	-7.60	-2.62
Fertilizers,	3	305.02	306.86	+1.84	+0.60

No. 36.] PROPORTION OF BUSINESS DONE, ETC. 103

www.libtool.com.cn DAYS IN OPERATION: BY INDUSTRIES — 1895, 1896 - Concluded.

	Number of Estab-	AVERAGE OF I IN OPER	NUMBER DAYS	INCREAS OR DECREA	8E (). IN
Industries.	lishments Con- sidered	1895	1896	Days	Percent-
Fine arts and taxidermy,		807.40	202.07	4.50	
	8	807.40	308.27	-4.18	-1.84
Fireworks and matches,	4	257.46	295.44	+87.98	+14.75
Flax, hemp, jute, and linen goods,	10	290.06	267.21	-22.85	-7.88
Food preparations,	819	298.47	297.42	-1.05	-0.85
Furniture,	119	291.97	288.17	-8.80	-1.80
Glass,	14	290.06	261.17	-28.89	-9.96
Glue, isinglass, and starch,	23	259.80	241.81	-17.99	6.94
Hair work (animal and human),	7	265.07	263.84	-1.78	-0.65
Hose: rubber, linen, etc.,	4	805.44	806.89	+1.45	+0.47
Hosiery and knit goods,	42	298.15	297.78	-10.87	-3.48
Ink, mucilage, and paste,	7	801.81	802.61	+0.80	+0.27
Ivory, bone, shell, and horn goods, etc., .	18	283.87	279.77	-8.60	-1.27
Leather,	148	294.73	286.18	-8.60	-2.92
Liquors and beverages (not spirituous), .	28	301.67	299.05	-2.62	0.87
Liquors: malt, distilled, and fermented, .	57	290.63	289.65	0.98	-0.84
Lumber,	82	246.67	272.48	+25.76	+10.44
Machines and machinery,	871	297.55	292.16	5.39	-1.81
Metals and metallic goods,	882	284.14	278.79	5.85	-1.88
Mixed textiles,	12	293.35	258.01	-85.84	-12.05
Models, lasts, and patterns,	49	293.16	289.04	-4.12	-1.41
Musical instruments and materials,	65	289.23	272.24	-16.99	5.87
Oils and illuminating fluids,	9	803.83	804.10	+0.27	+0.09
Paints, colors, and crude chemicals, .	23	276.12	264.17	-11.95	-4.88
Paper and paper goods,	123	287.34	272.56	-14.78	-5.14
Perfumes, toilet articles, etc.,	4	294.62	284.24	10.88	-8.52
Photographs and photographic materials,	24	803.83	292.75	-11.08	-8.65
Polishes and dressing,	38	291.90	296.84	+4.94	+1.69
Printing, publishing, and bookbinding, .	47	286.47	296.58	+10.11	+3.58
Print works, dye works, and bleacheries,	47	298.82	282.44	-16.38	-5.48
Railroad construction and equipment, .	16	287.98	288.52	+0.59	+0.20
Rubber and elastic goods,	41	283.89	266.73	-17.16	-6.04
Saddlery and harness,	41	290.08	286.60	-3.48	-1.20
Scientific instruments and appliances, .	20	296.55	300.78	+4.18	+1.41
Shipbuilding,	51	276.89	285.05	+8.16	+2.95
Silk and silk goods,	9	296.65	259.33	-87.82	-12.58
Sporting and athletic goods,	9	801.33	280.95	-20.38	-6.76
Stone,	199	281.65	280.99	0.66	-0.23
Straw and palm leaf goods,	21	273.97	272.87	-1.60	-0.58
Tallow, candles, soap, and grease,	60	298.21	291.85	-6.36	-2.13
Tobacco, snuff, and cigars,	48	293.47	290.02	-3.45	-1.18
Toys and games (children's),	11	288.56	288.79	+0.23	+0.08
Trunks and valises,	7	287.32	248.07	-39.25	-18.66
Whips, lashes, and stocks,	15	298.65	274.42	-24.23	-8.11
Wooden goods,	153	287.58	285.22	-2.86	-0.82
Woollen goods,	122	292.19	259.65	-82.54	-11.14
Worsted goods,	27	805.64	279.35	-26.29	-8.60
Att Tunyanna					
ALL INDUSTRIES,	4,609	291.56	279.48	-12.18	-4.16

STATISTICS OF MANUFACTURES: INDUSTRY PRESENTATIONS.

BOOTS AND SHOES. CARPETINGS. CARRIAGES AND WAGONS. CLOTHING. COTTON GOODS. FOOD PREPARATIONS. FURNITURE. HOSIERY AND KNIT GOODS. LEATHER. MACHINES AND MACHINERY. METALS AND METALLIC GOODS. MUSICAL INSTRUMENTS AND MATERIALS. PAPER AND PAPER GOODS. WOOLLEN GOODS. WORSTED GOODS. ALL INDUSTRIES.

1895, 1896.

NOTES

The following explanatory notes should be read in connection with the tables to which they refer:

ESTABLISHMENTS, PARTNERS, ETC.

There are duplications in the lines devoted to "Number of private firms," "Partners," "Number of corporations," and "Stockholders." They are caused by the fact that the same firm or corporation is often engaged in manufacturing in two or more establishments located in different towns and sometimes in different industries. The plan adopted has been to consider each establishment (whether managed in connection with another or not) as one, and to credit the whole number of firms, partners, corporations, and stockholders to each industry, but to count them once only in making up the total for the presentation "All Industries." The industries in which these duplications appear may be ascertained by reference to the tables on pages 4 to 11.

CAPITAL INVESTED.

In this presentation, the figures given against "Amount of capital invested" represent the returns made by the same establishments for each of the years given. Comparison is made, as regards the amount of capital invested, between these two years. The relative increase or decrease in the later year as compared with the earlier year is given in amounts and percentages.

STOCK USED.

In this presentation, the figures given against "Total value of stock used" represent the returns made by the same establishments for each of the years given. Comparison is made between the value of stock used in each of these two years. The relative increase or decrease in the later year as compared with the earlier year is given in amounts and percentages.

GOODS MADE.

In this presentation, the figures given against "Total value of goods made and work done" represent the returns made by the same establishments for each of the years given. Comparison is made between the value of goods made and work done in each of these two years. The relative increase or decrease in the later year as compared with the earlier year is given in amounts and percentages.

PERSONS EMPLOYED.

This presentation is divided into two sections. In the first is shown the aggregate average number of persons employed, the aggregate number of persons employed at periods of employment of the smallest number, the aggregate number of persons employed at periods of employment of the greatest number, and the excess of greatest over smallest number. By the terms "Periods of employment of smallest number" and "Periods of employment of greatest number" are meant those times, as regards aggregate number of persons employed, when the smallest or greatest number, respectively, was employed. The relative increase or decrease, expressed in amounts and percentages, is also given for one year as compared with the other. In the second section is shown the aggregate number of persons employed, by sex, during each month of the two years specified. It must be borne in mind that the number of persons here enumerated are wage earners only; officers, clerks, or other salaried persons are not included.

WAGES AND EARNINGS.

In this presentation is shown the total amount paid in wages to all wage earners employed for each of the two years, the average yearly earnings per individual without regard to sex or age, and the relative increases or decreases in one year as compared with the other, expressed in

amounts and percentages. The average yearly earnings have been obtained by dividing the sum of the total amount paid in wages by the figures representing the average number of persons employed. In this section is also shown the classified weekly wages paid to employés, ranging from under \$5 per week to \$20 per week and over, and the number of males and females receiving such wage. The returns were made by manufacturers to cover the week during which the largest number of persons was employed. It must be borne in mind that these figures represent the sums paid to wage earners only and do not include amounts paid to officers, clerks, or other salaried persons.

PROPORTION OF BUSINESS DONE AND DAYS IN OPERATION.

In this presentation is shown the average proportion of business done and the average number of days in operation. Greatest capacity, or maximum production, has been considered 100 per cent, and the percentages given indicate the average proportion of business done by each establishment during each year on the basis stated. The average number of days in operation is based upon the average number of persons employed, the number of days worked in each establishment being multiplied by the figures representing the average number of persons, and the sum divided by the aggregate average number of persons, thus obtaining an average for each industry and for "All Industries." The relative increase or decrease in the later year as compared with the earlier year is given with its equivalent percentage.

108 STATISTICS OF MANUFACTURES. [Pub. Doc.

www.libtool.com.cn

BOOTS AND SHOES. 1895, 1896.

ESTABLISHMENTS, PARTNERS, ETC.

	NUMBER OF ESTABLISHMENTS CONSIDERED, PARTNERS, ETC.							Increase (+), De- crease (), or No Change (=-), in 1896		
Partners, etc.								Number	Percent- ages	
Number of establishmen	ts r	epor	ting,			605	605	=	_	
Number of private firms,	•					549	548	_1	-0.18	
Number of partners, .					.	899	892	_7	-0.78	
Males,					.	872	863	-9	-1.03	
Females,			•		.	9	13	+4	+44.44	
Special,						18	14	+1	+7.69	
Estates,			•	•		5	2	-8	-60.00	
Number of corporations,				•		56	57	+1	+1.79	
Number of stockholders,					.	810	926	+116	+14.32	
Males,						623	734	+111	+17.82	
Females,						158	168	+10	+6.33	
Banks, trustees, etc.,	•					29	24	5	-17.24	
Aggregates : partners an	d st	ockh	olde	rs,		1,709	1,818	+109	+6.38	

CAPITAL INVESTED.

CAPITAL INVESTED.	1895	1896	Increase (+), or Decrease (-), in 1896		
CAPITAL INVESTED.	1989 1980		Amount	Percent- age	
Amount of capital invested,	\$23,172,349	\$19,990,14 5	-\$3,182,204	-13.78	

STOCK USED. AGGREGATE VALUES.

STOCK USED.	1805	1000	Increase (+), or Decrease (-), in 1896	
STOCK USED.	1895 1896		Amount	Percent- age
Total value of stock used,	\$ 55,559,505	\$53,883,477	\$1,676,028	-8.02

GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1895	1896	Increase (+), or Decrease (-), in 1896		
GOODS MADE.	1590	1980	Amount	Percent-	
Total value of goods made and work done, .	\$89,938,212	\$ 87,9 4 5,168	-\$1,993,044	-2.22	

BOOTS AND SHOES - 1895, 1896 - Continued. PERSONS EMPLOYED.

Perso	P						1895	1896	Increase (+), or Decrease (-), in 1890		
T ERSO	A5 E	AFL	TED.					1390	Number	Percent- ages	
Average number,							43,180	42,263	-917	-2.12	
Smallest number,						.	33,362	32,679	-683	-2.05	
Greatest number,						.	52,063	51,998	65	-0.12	
Excess of greatest	over	sma	llest	num	ber,	.	18,701	19,319	+618	+3.30	

PERSONS EMPLOYED: BY MONTHS.

							1895		1896			
	мо	NTH	i.			Males	Females	Totals	Males	Females	Totals	
January,				•		29,629	12,929	42,558	28,360	12,743	41,103	
February,					.	29,741	12,873	42,614	29,565	13,366	42,931	
March,					.	30,664	13,361	44,025	29,979	13,216	43,195	
April, .					.	30,776	13,375	44,151	30,350	13,379	43,729	
May, .					.]	30,677	13,605	44,282	30,200	13,545	43,745	
June, .						31,253	18,613	44,866	29,932	13,339	43,271	
July, .						30,589	13,112	43,701	28,979	12,699	41,678	
August,						81,044	13,499	44,543	29,370	13,189	42,559	
September	,.					30,217	13,125	43,342	29,327	13,196	42,522	
October,						28,920	12,578	41,498	28,931	13,143	42,074	
November	, .					28,460	12,391	40,851	27,371	12,366	39,737	
December,						28,597	12,608	41,200	27,673	12,574	40,24	
During the	emi	ire y	ear,	٠.		2,344	866	8,210	2,108	949	3,05	

^{* 92} establishments in 1895; 85 establishments in 1896.

WAGES AND EARNINGS.

	1000	1000	Increase (+), or Decrease (-), in 1896		
WAGES AND EARNINGS.		1995	1896	Amounts	Percent- ages
Total amount paid in wages, Average yearly earnings,		\$20,838,632 482.60	82 0,834,331 492.9 7	-\$4,301 +10.37	-0.02 +2.15

110 STATISTICS OF MANUFACTURES. [Pub. Doc. www.libtool.com.cn

BOOTS AND SHOES-1895, 1896-Concluded.

CLASSIFIED WEEKLY WAGES.

CLASSIFICATI	ON ()F			1895		1896			
	WEEKLY WAGE.				Females	Totals	Males	Females	Totals	
Under \$5,	•	•		1,905	2,735	4,640	1,879	2,926	4,805	
\$5 but under \$6,			.	1,404	1,901	8,305	1,308	1,687	2,995	
\$6 but under \$7,	• .		٠,	1,815	2,061	8,876	1,861	1,967	8,828	
\$7 but under \$8,				2,222	1,842	4,064	2,187	1,872	4,000	
\$8 but under \$9,				2,337	1,615	8,952	2,441	1,713	4,154	
\$9 but under \$10,				3,412	1,729	5,141	8,303	1,808	5,111	
\$10 but under \$12,			.	5,335	2,049	7,384	5,271	2,264	7,535	
\$12 but under \$15,	•			7,988	1,505	9,498	7,838	1,457	9,295	
\$15 but under \$20,			.	7,024	513	7,537	6,623	615	7,238	
\$20 and over, .		•		2,432	82	2,464	2,385	56	2,441	
TOTALS, .				35,874	15,982	51,856	85,046	16,365	51,411	

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND	1005	1000	Increase (+), or Decrease (-), in 1896		
DAYS IN OPERATION.	1895	1896	Proportion and Days	Percent-	
Average proportion of business done, . Average number of days in operation, .	62.04 284.64	58.61 282.30	-3.43 -2.84	-5.58 -0.82	

CARPETINGS. 1895, 1896.

ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERS	šD,	1895	1906	Increase Crease No Change ((十), De- (一), or —), in 1896
PARTNERS, ETC.				Number	Percent- ages
Number of establishments reporting,		12	12	=	-
Number of private firms,		8	8	=	-
Number of partners,		. 4	4	=	-
Males,		4	4	=	-
Number of corporations,		9	9	=	-
Number of stockholders,		1,056	1,055	-1	-0.09
Males,		477	487	+10	+2.10
Females,		396	888	_8	-2.02
Banks, trustees, etc.,		183	180	-8	-1.64
Aggregates: partners and stockholders,		1,060	1,059	-1	-0.09

CARPETINGS — 1895, 1896 — Continued.

CAPITAL INVESTED.

Constant Assessed	1605	1896	INCREASE (+), OR DECREASE (-), IN 1890	
CAPITAL INVESTED.	1895	1990	Amount	Percent-
Amount of capital invested,	\$6,008,497	\$ 6,0 2 0, 4 85	+\$11,988	+0.20

STOCK USED. AGGREGATE VALUES.

STOCK USED.	1895	1896	Increase (+), or Decrease (-), in 1896	
SIOCA USED.	1300	1890	Amount	Percent-
Total value of stock used,	\$4,336,556	\$3,302,865	-\$1,038,69 1	-23.84

GOODS MADE. AGGREGATE VALUES.

	1895	1000	INCREASE (+), OR DECREASE (-), IN 1896		
Goods Made.	1990	1996	Amount	Percent-	
Total value of goods made and work done, .	\$7,213,798	\$5,674,687	-\$1,539,161	-21.84	

PERSONS EMPLOYED.

_						1895	1806	INCREASE (+), OR DECREASE (-), IN 1806		
PERSONS EMPLOYED.							1575	1940	Number	Percent-
Average number,	•	•	•	•			4,616	4,232	-884	-8.82
Smallest number,						.	4,851	8,417	-984	-21.47
Greatest number,						.	4,794	4,791	∥8	0.06
Excess of greatest over smallest number,							448	1,874	+931	+210.16

PERSONS EMPLOYED: BY MONTHS.

						1605		1806		
	M	DETH	8.		Males	Females	Totals	Males	Females	Totals
January,			•		2,182	2,519	4,701	2,152	2,472	4,024
February,				.	2,184	2,491	4,675	2,174	2,362	4,536
March,				.	2,063	2,460	4,543	2,191	2,285	4,476
April, .				.	2,101	2,885	4,486	2,115	2,294	4,409
May,				.	2,152	2,369	4,521	2,165	2,411	4,576
June, .					2,209	2,468	4,677	2,158	2,419	4,572

STATISTICS OF MANUFACTURES. [Pub. Doc. 112

www.libtool.com.cn CARPETINGS — 1895, 1896 — Concluded.

PERSONS EMPLOYED: BY MONTHS - Concluded.

							1895		1896		
	M	ONTH	8.			Males	Females	Totals	Males	Females	Totals
July, .			•	٠.		2,206	2,450	4,656	2,178	2,298	4,476
August,					.	2,251	2,416	4,667	2,078	2,088	4,161
September,						2,201	2,426	4,627	1,556	1,363	2,919
October,	•					2,235	2,400	4,635	1,891	1,793	3,684
November,					.	2,151	2,377	4,528	2,047	2,035	4,082
December,					.	2,238	2,438	4,676	2,126	2,163	4,289
During the	en	tire y	ear,	٠.	.	91	12	103	390	90	480

^{*} Two establishments in 1895; four establishments in 1896.

WAGES AND EARNINGS.

W. con and Elements	1005	1000	Increase (+), or Decrease (-), in 1896	
Wages and Earnings.	1895	1896	Amounts	Percent- ages
Total amount paid in wages, Average yearly earnings,	\$1,709,689 370.38	\$1,443,472 341.09	-\$266,217 -29.29	-15.57 -7.91

CLASSIFIED WEEKLY WAGES.

CLASSIFICATI	ON (F			1895		1896			
	WEEKLY WAGE.				Females	Totals	Males	Females	Totals	
Under \$5,	•			403	736	1,139	375	612	987	
\$5 but under \$6,			.	127	510	637	175	532	707	
\$6 but under \$7,				267	480	747	223	398	621	
\$7 but under \$8,				278	275	558	180	406	586	
\$8 but under \$9,			.	120	217	337	236	257	493	
\$9 but under \$10,			.	266	234	500	249	166	415	
\$10 but under \$12,			.	268	93	361	289	145	434	
\$12 but under \$15,			.	262	8	265	264	13	277	
\$15 but under \$20,			.	185	_	185	201	-	201	
\$20 and over, .				60	-	60	67	-	67	
TOTALS, .				2,236	2,548	4,784	2,259	2,529	4,788	

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND	1005	1896	Increase (+), or Decrease (-), in 1896		
DAYS IN OPERATION.	1895	1980	Proportion and Days	Percent- ages	
Average proportion of business done, Average number of days in operation,	73.50 299.63	68.25 241.14	-5.25 -58.49	-7.14 -19.52	

CARRIAGES AND WAGONS. 1895, 1896.

ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHM			on s ii	ERE	D,	1895	1806	Increase (+), De- CREASE (-), OR NO CHANGE (-), IN 1896		
PARTNERS, ETC.								Number	Percent-	
Number of establishment	s rej	por	ting,			143	143	=	-	
Number of private firms,						132	132	∥ =	-	
Number of partners,						190	191	+1	+0.58	
Males,					.	186	185	-1	-0.54	
Females,					.	1	1	=	_	
Special,						1	1	=	-	
Estates,	•			•		2	4	+2	+100.00	
Number of corporations,						11	11	=	-	
Number of stockholders,					.	166	166	=	_	
Males,						104	103	_1	-0.96	
Females,						59	58	_1	-1.69	
Banks, trustees, etc.,			•			8	5	+2	+66.67	
Aggregates : partners and	i sto	ckh	oldeı	s,		356	357	+1	+0.28	

CAPITAL INVESTED.

	1895	1000	Increase (+), or Decrease (-), in 1896	
Capital Invested.	1900	1896	Amount	Percent- age
Amount of capital invested,	\$2,416,494	\$2,362,896	\$53,598	-2.22

STOCK USED. AGGREGATE VALUES.

O W	1895	1000	Increase (+), or Decrease (-), in 1896	
STOCK USED.	1990	1896	Amount	Percent- age
Total value of stock used,	\$1,813,499	\$1,664,385	-\$149,114	-8.22

GOODS MADE. AGGREGATE VALUES.

Cons. W	1805	1006	Increase (+), or Decrease (-), in 1896		
Goods Made.	1895	1896	Amount	Percent-	
Total value of goods made and work done, .	\$4,047,680	\$3,788,346	-\$259,334	-6.41	

114 STATISTICS OF MANUFACTURES. [Pub. Doc.

WWW.libtool.com.cn CARRIAGES AND WAGONS—1895, 1896—Continued. PERSONS EMPLOYED.

Perso	10						1895	1806	Increase (+), or Decrease (-), in 1896		
PERSO	NS E	MPLC	YED.				1949	1396	Number	Percent- ages	
Average number,							2,178	1,972	-201	-9.25	
Smallest number,							1,616	1,481	-135	-8.35	
Greatest number,							2,677	2,503	-174	-6.50	
Excess of greatest over smallest number,					.	1,061	1,022	39	-3.68		

PERSONS EMPLOYED: BY MONTHS.

			_				1895			1896	
	мо	NTH	8.			Males	Females	Totals	Males	Females	Totals
January,						2,116	20	2,136	2,047	20	2,067
February,					.	2,206	22	2,228	2,116	22	2,138
March,					.	2,856	24	2,380	2,209	20	2,229
April, .					.	2,470	23	2,493	2,331	22	2,853
Мау, .					.	2,507	18	2,525	2,368	22	2,390
June, .					-	2,426	19	2,445	2,252 •	19	2,271
July, .					.	2,011	13	2,024	1,820	12	1,832
August,					.	1,936	10	1,946	1,686	11	1,697
September,					.	1,906	11	1,917	1,599	8	1,607
October,						1,915	11	1,926	1,590	9	1,599
November,						1,986	9	1,945	1,626	10	1,636
December,						1,979	14	1,993	1,695	13	1,708
During the	enti	ire y	ear,	٠.		219	2	221	148	-	148

^{* 25} establishments in 1895; 21 establishments in 1896.

WAGES AND EARNINGS.

	100-		Increase (+), or Decrease (-), in 1896		
Wages and Earnings.	1895	1896	Amounts	Percent- ages	
Total amount paid in wages, Average yearly earnings,	\$1,261,459 580.51	\$1,140,027 578.11	-\$121,432 -2.40	-9.63 -0.41	

CARRIAGES AND WAGONS — 1895, 1896 — Concluded. CLASSIFIED WEEKLY WAGES.

CLASSIFICATI	ON (O P			1895		1896				
WEEKLY W				Males	Females	Totals	Males	Females	Totals		
Under \$5,				29	2	81	44	8	47		
\$5 but under \$6,			.	36	5	41	27	5	32		
\$6 but under \$7,			.	81	3	84	57	4	61		
\$7 but under \$8,			.	80	9	89	103	5	108		
\$8 but under \$9,				103	1 1	104	84	2	86		
\$9 but under \$10,				267	2	269	264	4	268		
\$10 but under \$12,			.	498	2	500	424	-	424		
\$12 but under \$15,			.	885	-	885	752	1	753		
\$15 but under \$20,			.	600	1	601	599	-	599		
\$20 and over, .				91	-	91	62	-	62		
Totals, .				2,670	25	2,695	2,416	24	2,440		

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND	1895	1896	Increase Decrease (-	(+), or), in 1896
DAYS IN OPERATION.	1990	1990	Proportion and Days	Percent- ages
Average proportion of business done,	60.23 288.90	56.43 278.03	-3.80 -10.87	-6.31 -3.76

CLOTHING. 1895, 1896.

ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLIS			onsii	DERE	ъ,	1895	1896	Increase (+), De- Crease (-), or No Change (-), in 1896		
PARTNERS, ETC.							Number	Percent- ages		
Number of establishme	nts 1	repor	ting,			130	130	=	-	
Number of private firm	18, .					110	109	—1	-0.91	
Number of partners,						202	196	—6	-2.97	
Males,					.	199	191	⊢8	-4.02	
Females,					.	1	2	+1	+100.00	
Special,						2	2	=	-	
Estates,						-	1	+1	-	
Number of corporation	в, .					20	21	+1	+5.00	
Number of stockholder	в, :				.	398	407	+9	+2.26	
Males,					.	271	293	+22	+8.12	
Females,					.	106	103	-3	-2.83	
Banks, trustees, et	c., .					21	11	-10	-47.62	
Aggregates: partners	and st	tocki	olde	rs,		600	603	+3	+0.50	

116 STATISTICS OF MANUFACTURES. [Pub. Doc.

www.libtool.com.cn

CLOTHING - 1895, 1896 - Continued.

CAPITAL INVESTED.

	1895	1800	Increase (+), or Decrease (-), in 1896	
Capital Invested.	1895 1896		Amount	Percent-
Amount of capital invested,	\$4,346,666	\$4, 054,647	-\$292,019	6.72

STOCK USED. AGGREGATE VALUES.

	1895	1000	Increase (+), or Decrease (-), in 1896	
STOCK USED.		1896	Amount	Percent-
Total value of stock used,	\$11,131,226	\$9,646,549	-\$1,484,677	-13.34

GOODS MADE. AGGREGATE VALUES.

G W	1007	1000	Increase (+), or Decrease (-), in 1896		
GOODS MADE.	1895 1896		Amount	Percent- age	
Total value of goods made and work done, .	\$18,766,275	\$16,652,997	-\$2,113,278	11.26	

PERSONS EMPLOYED.

D						1005	1000	Increase (+), or Decrease (-), in 1896		
PERSONS EMPLOYED.							1895	1896	Number	Percent- ages
Average number,							7,231	6,936	-295	-4.08
Smallest number,							5,547	5,167	-380	6.85
Greatest number,							8,518	8,350	-163	-1.91
Excess of greatest over smallest number,							2,966	3,183	+217	+7.32

PERSONS EMPLOYED: BY MONTHS.

							1895		1896		
	м	ONTHS	3.			Males	Females	Totals	Males	Females	Totals
January,	•			•		2,181	4,706	6,887	2,041	4,908	6,949
February,					.	2,256	4,979	7,235	2,083	5,226	7,309
March,					.	2,258	5,377	7,630	2,048	5,333	7,381
April, .						2,220	5,286	7,506	2,029	5,267	7,296
May, .						2,198	5,233	7,481	1,980	5,209	7,189
June, .					.	2,207	5,016	7,228	1,944	4,918	6,862

No. 36.] INDUSTRY PRESENTATIONS. www.libtool.com.cn

CLOTHING — 1895, 1896 — Concluded.

							1895			1896			
	M	ONTH	S.			Males	Females	Totals	Males	Females	Totals		
July, .		•				2,210	4,043	6,258	1,896	8,942	5,838		
August,		`.			.	2,278	4,406	6,684	1,951	4,263	6,214		
September					.	2,302	5,000	7,302	1,990	5,034	7,024		
October,					.	2,368	5,365	7,788	2,009	5,263	7,272		
November,					.	2,375	5,159	7,584	2,008	5,018	7,026		
December,						2,350	4,959	7,309	1,925	4,912	6,837		
During the	en	tire y	ear,	٠.		409	292	701	352	442	794		

PERSONS EMPLOYED: BY MONTHS - Concluded.

WAGES AND EARNINGS.

Wages and Earnings.	1895	1896	Increase Decrease (—	(+), or), in 1896
WAGES AND LARNINGS.	1990	1990	Amounts	Percent- ages
Total amount paid in wages, Average yearly earnings,	\$2,863,300 895.98	\$2,550,241 367.68	\$313,059 28.30	-10.93 -7.15

CLASSIFIED WEEKLY WAGES.

Classificati	ON C	F			1895		1896			
WEEKLY W	-			Males	Females	Totals	Males	Females	Totals	
Under \$5,				203	1,309	1,512	139	1,112	1,251	
\$5 but under \$6,				122	935	1,057	101	888	989	
\$6 but under \$7,			.	160	1,289	1,449	143	1,088	1,231	
\$7 but under \$8,			.	193	838	1,031	144	971	1,115	
\$8 but under \$9,				169	640	809	177	855	1,082	
\$9 but under \$10,				218	442	660	237	520	757	
\$10 but under \$12,				310	337	647	330	331	661	
\$12 but under \$15,				425	160	585	370	157	527	
\$15 but under \$20,				401	43	444	872	48	420	
\$20 and over, .				322	7	329	303	9	312	
TOTALS, .				2,523	6,000	8,523	2,316	5,979	8,295	

PROPORTION OF BUSINESS DONE.

Proportion of Business Done and	1895	1896	Increase Decrease (—	(十), or), in 1896	
DAYS IN OPERATION.	1980	1980	Proportion and Days	Percent- ages	
Average proportion of business done, Average number of days in operation,	64.08 290.25	59.94 278.18	-4.09 -12.12	-6.39 -4.18	

^{* 28} establishments in 1895; 26 establishments in 1896.

COTTON GOODS. 1895, 1896.

ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF					onsin	ERE	D,	1895	1896	Increase (+), De- crease (-), or No Change (-), in 189		
	PARTNERS, ETC.									Number	Percent- ages	
Number of est	ablia	hmen	ts r	epor	ing,			169	169	=	-	
Number of pri	vate	firms,	•					84	84	=	-	
Number of par	tner	8,					.	62	62	=	-	
Males, .							.	51	53	+2	+8.92	
Females,							.	7	7	=	-	
Estates,				•				4	2	-2	-50.00	
Number of cor	pora	tions,						135	135	=	-	
Number of sto	ckho	lders	, .					21,989	22,281	+342	+1.56	
Males, .								10,722	10,908	+186	+1.73	
Females,							.	8,210	8,446	+236	+2.87	
Banks, tru	stees	, etc.,					.	8,007	2,927	—80	-2.66	
Aggregates: p	artn	ers an	d s	tocki	olde	rs,	.	22,001	22,343	+342	+1.55	

CAPITAL INVESTED.

Q I	1895	1000	INCREASE (-	(十), or), in 1896
CAPITAL INVESTED.	1990	1896	Amount	Percent- age
Amount of capital invested,	\$116,141,614	\$112,902,817	-\$3,238,797	2.79

STOCK USED. AGGREGATE VALUES.

STOCE USED.	1895	1896	Increase (-	(+), or), in 1896
STOCK USED.	1990	1990	Amount	Percent- age
Total value of stock used,	\$4 6, 244 , 4 35	\$ 50, 2 97,985	+\$4,053,550	+8.77

GOODS MADE. AGGREGATE VALUES.

Conn. Man.	1895	1000	Increase (+), or Decrease (-), in 1896		
GOODS MADE.	1990	1896	Amount	Percent- age	
Total value of goods made and work done, .	\$89,615,751	\$87,146,004	-\$2,469,747	-2.76	

COTTON GOODS - 1895, 1896 - Continued. PERSONS EMPLOYED.

PERSO	10						1895	1596	Increase (+), or Decrease (-), in 1896		
FERSC	NS E	MPLC	YED.				1993	1990	Number	Percent- ages	
Average number,							79,795	78,058	-1,787	-2.18	
Smallest number,						.	78,778	66,044	-7,784	-10.48	
Greatest number,		•					83,545	86,494	+2,949	+8.58	
Excess of greatest	over	sma	llest	num	ber,	.	9,767	20,450	+10,683	+109.38	

PERSONS EMPLOYED: BY MONTHS.

							1895			1896	
	M	ONTH	3.			Males	Females	Totals	Males	Females	Totals
January,						39,197	40,820	80,017	40,823	41,182	82,005
February,					.	39,246	40,827	80,073	40,864	41,195	82,059
March,						39,550	40,863	80,413	40,909	41,291	82,200
April, .					.	39 ,363	40,938	80,301	40,346	40,644	80,990
May, .					.]	39,282	41,019	80,301	39,964	40,859	80,323
June, .					.]	39,389	40,697	80,086	39,586	39,769	79,355
July, .				•	- 1	38,619	89,713	78,332	87,592	37,094	74,686
August,					.	38,288	39,462	77,750	33,670	83,026	66,696
September	,.					39,178	40,244	79,422	85,736	85,519	71,255
October,						39,124	40,293	79,417	38,921	39,020	77,941
November,				•	.	39,761	40,953	80,714	39,567	39,663	79,230
December,			•			39,785	40,986	80,771	40,332	40,559	80,891
During the	en	tire v	ear.	٠.		8,358	7,881	16,239	4,642	4,273	8,91

^{* 29} establishments in 1895; 17 establishments in 1896.

WAGES AND EARNINGS.

W. ove two W. names		1007	1000	Increase (+), or Decrease (-), in 1896		
WAGES AND EARNINGS.	 	1895	1896	Amounts	Percent- ages	
Total amount paid in wages, Average yearly earnings,	•	\$26,284,125 \$28.77	\$25,865,194 831.86	\$368,931 +2.59	-1.41 +0.79	

COTTON GOODS — 1895, 1896 — Concluded. CLASSIFIED WEEKLY WAGES.

Classificati	ON C) P			1895		1896			
WEEKLY W				Males	Females	Totals	Males	Females	Totals	
Under \$5,		•		7,560	12,206	19,766	7,799	12,485	20,284	
\$5 but under \$6,			.	4,927	8,806	13,733	5,050	8,865	13,915	
\$6 but under \$7,				6,875	8,265	15,140	7,279	8,370	15,649	
\$7 but under \$8,			.	5,269	6,409	11,678	5,526	6,806	12,332	
\$8 but under \$9,			.	4,928	•4,334	9,262	5,156	4,674	9,830	
\$9 but under \$10,			.	8,520	1,648	5,168	3,514	1,499	5,013	
\$10 but under \$12,				4,236	596	4,832	4,338	574	4,912	
\$12 but under \$15,			.	2,227	63	2,290	2,300	51	2,351	
\$15 but under \$20,			.	1,038	3	1,041	1,033	1	1,034	
\$20 and over, .				614	-	614	649	-	649	
TOTALS, .				41,194	42,330	83,524	42,644	43,325	85,969	

PROPORTION OF BUSINESS DONE.

Proportion of Business Done and	1007		Increase Decrease (-	(+), or ·), in 1896
DAYS IN OPERATION.	1895	1896	Proportion and Days	Percent-
Average proportion of business done, . Average number of days in operation, .	87.22 297.36	77.33 279.53	-9.89 -17.83	-11.34 -6.00

FOOD PREPARATIONS. 1895, 1896.

ESTABLISHMENTS, PARTNERS, ETC.

Number of Esta				onsii	ERE	D,	1895	1896	Increase crease (No Change (Increase (+), De- crease (-), or No Change (=), in 1896		
Par	TNER	18, E	TC.						Number	Percent- ages		
Number of establis	hme	n ts 1	repor	ting,			319	819	=	-		
Number of private	firm	в, .					278	273	-5	-1.80		
Number of partners	١,	•				.	403	395	8	-1.99		
Males,						.	390	382	_8	-2.05		
Females, .						.	6	6	=	-		
Special, .							1	-	_1	-100.00		
Estates, .							6	7	+1	+16.67		
Number of corpora	tions	١, .					41	46	+5	+12.20		
Number of stockho	lder	8,.				.	678	705	+27	+3.98		
Males,							546	577	+31	+5.68		
Females, .							110	104	6	-5.45		
Banks, trustees	, etc	٠, .					22	24	+2	+9.09		
Aggregates: partne	rs a	nd s	tocki	olde	rs,		1,081	1,100	+19	+1.76		

FOOD PREPARATIONS - 1895, 1896 - Continued. CAPITAL INVESTED.

Carrier Island	1895	. 1896	Increase (+), or Decrease (-), in 1896		
CAPITAL INVESTED.	1990	1980	Amount	Percent-	
Amount of capital invested,	\$18,977,217	\$13,687,962	\$289,255	-2.07	

STOCK USED. AGGREGATE VALUES.

	1002	1000	Increase Decrease (-	(+), or), in 1896
STOCK USED.	1895	1896	Amount	Percent- age
Total value of stock used,	\$32,369,971	\$30,465,871	-\$1,904,100	-5.88

GOODS MADE. AGGREGATE VALUES.

	1005	1600	Increase (+), or Decrease (-), in 1896		
GOODS MADE.	1895	1896	Amount	Percent-	
Total value of goods made and work done, .	\$41,952,077	\$40,410,983	-\$1,541,094	-3.67	

PERSONS EMPLOYED.

							1005	1000	Increase Decrease (-	(+), or -), in 1896
Perso	NS E	MPLO	YED.				1895	1896	Number	Percent- ages
Average number,	•	•		•	•		6,784	6,859	+75	+1.11
Smallest number,							5,640	5,719	+79	+1.40
Greatest number,							9,061	8,624	-437	-4.82
Excess of greatest	over	smal	llest	num	ber,	.	3,421	2,905	-516	-15.08

PERSONS EMPLOYED: BY MONTHS.

							1895			1896			
	Mo	ONTH	8.	•		Males	Females	Totals	Males	Females	Totals		
January,				•		5,889	1,698	7,087	5,082	1,768	6,850		
February,						5,272	1,707	6,979	5,102	1,824	6,926		
March,					.	4,676	1,817	6,493	4,625	1,870	6,495		
April, .					.	4,557	1,783	6,340	4,576	1,869	6,445		
May,						4,574	1,778	6,352	4,767	1,839	6,606		
June, .						4,681	1,788	6,469	4,876	1,846	6,722		

FOOD PREPARATIONS — 1895, 1896 — Concluded. PERSONS EMPLOYED: BY MONTHS — Concluded.

Months.							1895			1896			
	м	ONTH	8.			Males	Females	Totals	Males	Females	Totals		
July, .						4,834	1,840	6,674	4,912	1,842	6,754		
August,					.	4,708	1,768	6,476	4,834	1,768	6,602		
September,					.	4,803	2,038	6,841	4,921	1,981	6,902		
October,					.	4,957	2,188	7,145	5,027	2,221	7,248		
November,					.	5,038	2,349	7,387	5,103	2,293	7,396		
December,					.	4,924	2,192	7,116	5,059	2,178	7,232		
During the	en	tire y	ear.	٠.	.	976	144	1,120	891	120	1,011		

^{* 157} establishments in 1895; 138 establishments in 1896.

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1895	1896	Increase (+), or Decrease (-), in 1896	
WAGES AND EXERINGS.	1990	1890	Amounts	Percent- ages
Total amount paid in wages, Average yearly earnings,	\$3,042,852 448.53	\$3,105,154 452.71	+\$62,302 +4.18	+2.05 +0.93

CLASSIFIED WEEKLY WAGES.

CLASSIFICAT	ION () F			1895		1896			
WEEKLY W				Males	Females	Totals	Males	Females	Totals	
Under \$5,				228	1,472	1,700	303	1,429	1,732	
\$5 but under \$6,				327	491	818	229	470	699	
\$6 but under \$7,			.	410	440	850	393	435	828	
\$7 but under \$8,			.	343	124	467	423	114	537	
\$8 but under \$9,			.	904	51	955	977	68	1,045	
\$9 but under \$10,			.	1,026	42	1,068	935	33	968	
\$10 but under \$12,			.	1,001	83	1,084	951	27	978	
\$12 but under \$15,			. [1,419	12	1,431	1,418	14	1,427	
\$15 but under \$20,			.	660	6	666	609	5	614	
\$20 and over, .				174	-	174	173	-	178	
TOTALS, .			.	6,492	2,671	9,168	6,406	2,595	9,001	

PROPORTION OF BUSINESS DONE.

PROPORTION OF BUSINESS DONE AND	1895	1896	Increase Decrease (-	(十), or), in 1896
Days in Operation.	1390	1990	Proportion and Days	Percent- ages
Average proportion of business done, Average number of days in operation,	61.46 298.47	60.71 297.42	-0.75 -1.05	-1.22 -0.85

FURNITURE. 1895, 1896.

ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHS) NSII	ERE	ь,	1895	1896	INCREASE (+), DE- CREASE (-), OR NO CHANGE (-), IN 1896		
Partners, etc.								Number	Percent- ages	
Number of establishment	s r	eport	ing,			119	119	=	-	
Number of private firms,						108	106	_2	-1.85	
Number of partners, .					.	178	175	_s	-1.69	
Males,					.	166	162	4	-2.41	
Females,						9.	9	=	-	
Special,					.	1	2	+1	+100.00	
Estates,				•	•	2	2	=	-	
Number of corporations,						11	18	+2	+18.18	
Number of stockholders,						321	319	_2	-0.62	
Males,					.	152	207	+55	+36.18	
Females,						117	80	_37	-31.62	
Banks, trustees, etc.,	•					52	32	-20	-38.46	
Aggregates : partners and	d st	ockh	olde	rs,		499	494	5	-1.00	

CAPITAL INVESTED.

G T	1895	1896	Increase (+), or Decrease (-), in 1896	
Capital Invested.	1999	1980	Amount	Percent- age
Amount of capital invested,	\$3,611,891	\$3,470,925	-\$140,966	-3.90

STOCK USED. AGGREGATE VALUES.

G W	1895	1000	Increase (+), or Decrease (-), in 1896	
STOCK USED.		1896	Amount	Percent- age
Total value of stock used,	\$3,848,539	\$8,172,788	—\$ 675,751	-17.56

GOODS MADE. AGGREGATE VALUES.

Good William	1895	1896	INCREASE (+), OR DECREASE (-), IN 1896	
GOODS MADE.	1989	1980	Amount	Percent-
Total value of goods made and work done, .	\$7,166,182	\$6,100,549	-\$1,065,588	-14.87

FURNITURE — 1895, 1896 — Continued.

PERSONS EMPLOYED.

Persons Employed.							1895	1896	Increase (+), or Decrease (-), in 189		
FERSO	NS E	MPLC) I K D.				1999 1996		Number	Percent- ages	
Average number,							8,502	8,293	-209	_5.97	
Smallest number,							2,974	2,618	356	-11.97	
Greatest number,						.]	4,221	3,919	-302	-7.15	
Excess of greatest over smallest number,						1,247	1,301	+54	+4.33		

PERSONS EMPLOYED: BY MONTHS.

	.		_				1895			1896		
	MIO	NTH	8.			Males	Females	Totals	Males	Females	Totals	
January,						2,916	303	3,219	2,922	275	8,197	
February,					.	2,998	316	3,314	3,016	323	3,339	
March,					.	3,099	343	3,442	8,151	328	3,479	
April, .						8,082	358	8,440	8,167	335	3,502	
May, .						3,165	370	3,535	8,150	364	3,514	
June, .					.	8,100	368	8,468	3,014	379	3,393	
July, .					.	3,021	332	8,353	2,642	291	2,933	
August,					.	8,021	348	3,369	2,692	341	3,033	
September	•				.	3,233	358	3,591	2,809	348	3,157	
October,					.	3,508	407	3,915	2,962	367	8,329	
November,					.	3,533	407	8,940	2,972	366	8,338	
December,			•		.	3,289	368	8,652	2,922	320	8,242	
During the	enti	re y	ear,	٠.		421	38	459	379	34	418	

^{* 32} establishments in 1895; 23 establishments in 1896.

WAGES AND EARNINGS.

WACES AND FARMING	1895	1896	Increase (+), or Decrease (-), in 1896				
Wages and Earnings.				1999	1996	Amounts	Percent- ages
Total amount paid in wages, . Average yearly earnings,	•	•	•	\$1,713,187 489.19	\$1,578,746 479.42	-\$134,391 -9.77	-7.84 -2.00

FURNITURE - 1895, 1896 - Concluded.

CLASSIFIED WEEKLY WAGES.

CLASSIFICATI	ON () P			1895			1896	
WEEKLY W		-		Males	Females	Totals	Males	Females	Totals
Under \$5,				124	95	219	174	96	270
\$5 but under \$6,				144	74	218	129	64	193
\$6 but under \$7,				152	90	242	169	77	246
\$7 but under \$8,				331	94	425	844	117	461
\$8 but under \$9,		•	.	400	40	440	315	35	350
\$9 but under \$10,				582	32	614	478	13	486
\$10 but under \$12,				608	10	618	589	12	601
\$12 but under \$15,				79 4	6	· 800	712	6	718
\$15 but under \$20,			.	556	1 1	557	502	-	502
\$20 and over, .				91	-	91	94	-	94
Totals, .				8,782	442	4,224	8,501	420	3,921

PROPORTION OF BUSINESS DONE.

Proportion of Business Done and	1895	1000	INCREASE (+), OR DECREASE (-), IN 1896		
DAYS IN OPERATION.	1993	1896	Proportion and Days	Percent- ages	
Average proportion of business done, Average number of days in operation,	58.13 291.97	55.29 288.17	-2.84 -3.80	-4.89 -1.30	

HOSIERY AND KNIT GOODS. 1895, 1896.

ESTABLISHMENTS, PARTNERS, ETC.

Number of Establishments Considered, Partners, etc.					1895	1896	Increase (+), De- CREASE (), OR No Change (=-), IN 1896		
							Number	Percent- ages	
Number of establishments	repor	ting,			42	42	=	_	
Number of private firms, .					25	25	=	-	
Number of partners, .					44	46	+2	+4.55	
Males,				.	41	42	+1	+2.44	
Females,				.	2	4	+2	+100.00	
Special,					1	-	-1	-100.00	
Number of corporations, .					17	17	=	-	
Number of stockholders, .					1,830	1,805	—2 5	-1.88	
Males,				.	643	646	+8	+0.47	
Females,					435	408	—27	-6.21	
Banks, trustees, etc., .					252	261	-1	-0.40	
Aggregates : partners and s	tockh	older	ъ,		1,874	1,351	-23	-1.67	

126 STATISTICS OF MANUFACTURES. [Pub. Doc.

www.libtool.com.cn

HOSIERY AND KNIT GOODS — 1895, 1896 — Continued. CAPITAL INVESTED.

	1895		Increase (+), or Decrease (-), in 1890	
CAPITAL INVESTED.	1895	1896	Amount	Percent- age
Amount of capital invested,	\$4,477,439	\$4,208,270	-\$269,169	-6.01

STOCK USED. AGGREGATE VALUES.

STOCK USED.	1895	1896	Increase (+), or Decrease (-), in 1896	
STOCK USED.	1989	1980	Amount	Percent- age
Total value of stock used,	\$ 3,376,271	\$2,406,106	-\$970,165	-28.78

GOODS MADE. AGGREGATE VALUES.

Oarra Mar-	1895	1000	Increase (+), or Decrease (-), in 1896	
Goods Made.	1989	1896	Amount	Percent- age
Total value of goods made and work done, .	\$ 6,435,901	\$5,014,7 55	-\$1,421,146	-22.08

PERSONS EMPLOYED.

Persons E						1895	1896	Increase Decrease (-	INCREASE (+), OR DECREASE (-), IN 1896		
PERSONS E.	MPLO	YED.			.]	1990	1980	Number	Percent- ages		
Average number, .					.	5,605	5,646	+41	+0.78		
Smallest number, .					.	4,774	4,523	251	5.26		
Greatest number, .					.	6,360	6,456	+96	+1.51		
Excess of greatest over	smal	lest :	num	b er,	.	1,586	1,933	+347	+21.88		

PERSONS EMPLOYED: BY MONTHS.

						1895		1896				
	M	ONTH	s.		Males	Females	Totals	Males	Females	Totals		
January,					1,810	3,575	5,385	1,881	4,115	5,996		
February,					1,794	3,611	5,405	1,867	4,050	5,917		
March,					1,807	3,598	5,405	1,846	4,083	5,929		
April, .					1,887	3,564	5,451	1,741	4,022	5,763		
May, .					1,881	3,594	5,475	1,773	4,022	5,795		
June, .					1,897	3,673	5,570	1,725	3,893	5,618		

During the entire year,* .

HOSIERY AND KNIT GOODS — 1895, 1896 — Concluded. PERSONS EMPLOYED: BY MONTHS — Concluded.

							1895		1896				
	M	ONTH	5.			Males	Females	Totals	Males	Females	Totals		
July, .				•		1,878	3,493	5,871	1,642	3,755	5,397		
August,					.	1,959	3,653	5,612	1,557	3,422	4,979		
September	, .				.	1,928	3,731	5,659	1,690	3,312	5,002		
October,					.	1,967	3,965	5,932	1,770	8,831	5,601		
November,					.	1,982	4,083	6,065	1,830	8,964	5,794		
December,					.	1,952	3,964	5,916	1,795	3,889	5,684		

^{*} Four establishments in 1895; two establishments in 1896.

71

10

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1895	1896	Increase Decrease ((+), or), in 1896
WAGES AND CARNINGS.	1990	1980	Amounts	Percent- ages
Total amount paid in wages,	\$1,863,085 332.40	\$1,718,096 304.30	-\$144,989 -28.10	-7.78 -8.45

CLASSIFIED WEEKLY WAGES.

CLASSIFICAT	ion (OF.			1895		1896			
WEEKLY V				Males	Females	Totals	Males	Females	Totals	
Under \$5,	•			526	1,422	1,948	389	1,860	2,249	
\$5 but under \$6,			.	220	806	1,026	163	874	1,037	
\$6 but under \$7,				401	720	1,121	351	719	1,070	
\$7 but under \$8,			.	267	580	847	225	530	755	
\$8 but under \$9,			.	229	285	514	166	276	442	
\$9 but under \$10,				195	139	334	150	122	272	
\$10 but under \$12,			.	298	61	359	223	81	304	
\$12 but under \$15,				188	19	207	155	22	177	
\$15 but under \$20,			.	82	1 1	83	98	4	102	
\$20 and over, .				57	-	57	45	-	45	
TOTALS, .				2,463	4,033	6,496	1,965	4,488	6,458	

PROPORTION OF BUSINESS DONE.

Proportion of Business Done and	1	1005	1804	Increase Decrease (-	(+), or), in 1896
DAYS IN OPERATION.		1895	1896	Proportion and Days	Percent- ages
Average proportion of business done, . Average number of days in operation, .		62.86 298.15	57.26 287.78	-5.60 -10.37	8.91 3.48

128 STATISTICS OF MANUFACTURES. [Pub. Doc.

www.libtool.com.cn

LEATHER. 1895, 1896. ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHM			ONSID	ERE	D,	1895	1896	Increase (+), De- crease (-), or No Change (=), in 189		
Partners,	KT.	с.						Number	Percent- ages	
Number of establishment	s re	por	ing,			148	143	=	-	
Number of private firms,	•					124	123	—1	-0.81	
Number of partners,					. [221	221	=	-	
Males,					.	215	217	+2	+0.93	
Females,					.	1	1	=	-	
Special,					.	8	3	=	-	
Estates,	•			•		2	-	_2	100.00	
Number of corporations,						19	20	+1	+5.26	
Number of stockholders,						272	289	+17	+6.25	
Males,					.]	207	201	_6	-2.90	
Females,					.	55	71	+16	+29.09	
Banks, trustees, etc.,					.	10	17	+7	+70.00	
Aggregates : partners and	ste	ockh	older	ъ,	.	493	510	+17	+3.45	

CAPITAL INVESTED.

	1005	1000	Increase (+), or Decrease (-), in 1896		
CAPITAL INVESTED.	1895	1896	Amount	Percent- age	
Amount of capital invested,	\$8,479,094	\$7,329,970	-\$1,149,124	-13.55	

STOCK USED. AGGREGATE VALUES.

Oncor Horn	1007	1000	Increase (+), or Decrease (-), in 1896	
STOCK USED.	1895	1896	Amount	Percent-
Total value of stock used,	\$15,746,203	\$18,127,769	-\$2,618,434	-16.63

GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1895	1896	Increase (+), or Decrease (-), in 1896		
GOODS MADE.	1990	1990	Amount	Percent-	
Total value of goods made and work done, .	\$22,379,841	\$19,041,544	-\$3,338,297	-14.92	

LEATHER — 1895, 1896 — Continued. PERSONS EMPLOYED.

Dynao					j	1895	1896	Increase (+), or Decrease (-), in 1896		
Persons Employed.							1840	1690	Number	Percent- ages
Average number,							7,168	6,847	-821	-11.45
Smallest number,							5,787	5,018	—719	-12.53
Greatest number,							8,502	8,046	456	-5.36
Excess of greatest	over	sma	llest	num	ber,		2,765	8,028	+263	+9.51

PERSONS EMPLOYED: BY MONTHS.

							1895			1896	
	MC)NTH	3.			Males	Females	Totals	Males	Females	Totals
January,				•		6,637	273	6,910	6,489	292	6,781
February,					٠.	6,647	271	6,918	6,432	278	6,710
March,					.	6,546	266	6,812	6,264	256	6,520
April, .					.	6,655	269	6,924	6,220	262	6,482
May, .						6,859	271	7,130	6,167	261	6,428
June, .					.	7,099	268	7,367	6,126	246	6,372
July, .					.	7,170	259	7,429	6,031	233	6,264
August,					.	7,351	258	7,609	5,999	247	6,246
September,					.	7,393	282	7,675	5,696	260	5,956
October,					.	7,007	287	7,294	5,547	254	5,801
November,						6,674	292	6,966	5,873	264	6,137
December,						6,603	292	6,895	6,100	281	6,381
During the	en	tire y	ear,	٠.		586	21	607	178	-	178

^{* 21} establishments in 1895; 12 establishments in 1896.

WAGES AND EARNINGS.

W		1000	Increase (+), or Decrease (-), in 1896	
Wages and Earnings.	1895	1896	Amounts	Percent- ages
Total amount paid in wages,	\$3,448,203 481.06	\$2,984,515 470.22	-\$463,688 -10.84	-18.45 -2.25

LEATHER — 1895, 1896 — Concluded. CLASSIFIED WEEKLY WAGES.

CLASSIFICATI	ON (OF.	ļ		1895		1896			
WEEKLY WAGE.				Males Females Totals			Males Females Totals			
Under \$5,				189	78	267	196	78	274	
\$5 but under \$6,			.	155	49	204	216	50	266	
\$6 but under \$7,			.	419	69	488	415	58	473	
\$7 but under \$8,			.	651	48	699	639	63	702	
\$8 but under \$9,			.	957	60	1,017	861	28	889	
\$9 but under \$10,	•			1,891	23	1,914	1,799	10	1,809	
\$10 but under \$12,			.	2,177	2	2,179	1,890	13	1,903	
\$12 but under \$15,			.	1,080	8	1,083	1,046	. 2	1,048	
\$15 but under \$20,				580	2	582	472	-	472	
\$20 and over, .			.	128	-	123	125	-	125	
TOTALS, .	_			8,222	834	8,556	7,659	302	7,961	

PROPORTION OF BUSINESS DONE.

Proportion of Business Done and	1005	1896	Increase Decrease (-	(+), or -), in 1896
DAYS IN OPERATION.	1895	1850	Proportion and Days	Percent- ages
Average proportion of business done, Average number of days in operation,	66.51 294.73	58.35 286.13	-8.16 -8.60	-12.27 -2.92

MACHINES AND MACHINERY. 1895, 1896. ESTABLISHMENTS, PARTNERS, ETC.

Number of 1					onsi	DERE	D,	1895	1896	Increase Crease No Change (Increase (+), De- Crease (-), or No Change (=), in 1896		
	PARTNERS, ETC.									Number	Percent- ages		
Number of est	ablis	hme	nts	repor	ting,			371	871	=	-		
Number of pri	vate	firm	s, .	•				246	241	— 5	-2.03		
Number of par	tner	8,						369	359	-10	-2.71		
Males, .							.	853	338	—15	-4.25		
Females,							.	11	12	+1	+9.09		
Special,							.	1	-	-1	-100.00		
Estates,		•	•	•	•			4	9	+5	+125.00		
Number of cor	pora	tion	в, .				.	125	130	+5	+4.00		
Number of sto	kho	lder	в, .					4,105	4,256	+151	+3.68		
Males, .								2,727	2,743	+16	+0.59		
Females,							.	1,111	1,190	+79	+7.11		
Banks, tru	tees	, etc	٠, .					267	323	+56	+20.97		
Aggregates : p	artne	ers a	nd s	tock	olde	rs,		4,474	4,615	+141	+3.15		

www.libtool.com.cn MACHINES AND MACHINERY-1895, 1896-Continued. CAPITAL INVESTED.

A			Increase (—	(+), or), in 1896
CAPITAL INVESTED.	1995	1896	Amount	Percent-
Amount of capital invested,	\$23,167,426	\$23,783,634	+\$566,208	+2.44

STOCK USED. AGGREGATE VALUES.

STOCK USED.	1895	,	Increase (+), or Decrease (), in 1896		
STOCK UBED.	1999	1896	Amount	Percent- age	
Total value of stock used,	\$9,981,227	\$10,350,93 8	+\$419,711	+4.23	

GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1995	1896	INCREASE (-	(+), or), in 1896
GOODS MADE.	1800	1390	Amount	Percent-
Total value of goods made and work done, .	\$26,027,029	\$ 28, 489 ,9 2 0	+\$2,462,891	+9.46

PERSONS EMPLOYED.

Perso	wa 10						1007	1000	INCREASE (-	Increase (+), or Decrease (-), in 1896		
FEESU	NS E	mP10	TED.				1895	1896	Number	Percent- ages		
Average number,							16,983	18,082	+1,149	+6.79		
Smallest number,						.]	13,449	14,259	+810	+6.02		
Greatest number,							20,228	21,848	+1,120	+5.54		
Excess of greatest	over	sma	lest	num	ber,	.	6,779	7,089	+310	+4.57		

PERSONS EMPLOYED: BY MONTHS.

						1895		1896			
	M	ONTH	8.		Males	Females	Totals	Males	Females	Totals	
January,					15,163	826	15,489	18,772	412	19,184	
February,					15,184	825	15,509	18,788	386	19,174	
March,					15,159	298	15,452	18,810	897	19,207	
April, .					14,653	816	14,969	17,845	884	18,229	
May, .					15,425	828	15,758	17,817	810	18,127	
June, .					16,156	817	16,478	17,572	322	17,894	

MACHINES AND MACHINERY—1895, 1896—Concluded. PERSONS EMPLOYED: BY MONTHS—Concluded.

							1895		1896			
	M	ONTH	8.			Males	Females	Totals	Males	Females	Totals	
July, .			•	•		16,841	810	17,151	17,480	308	17,788	
August,					.	17,461	311	17,772	17,217	300	17,517	
September	, .				.	18,043	831	18,374	16,868	801	17,169	
October,	•					18,268	344	18,612	17,094	328	17,422	
November,						18,381	381	18,762	17,029	336	17,365	
December,						18,247	400	18,647	17,124	354	17,478	
During the	en	tire y	ear,	٠.		694	9	708	1,088	2	1,035	

^{* 63} establishments in 1895; 54 establishments in 1896.

WAGES AND EARNINGS.

W	1007	1000	Increase Decrease (—	(十), or), in 1896
Wages and Earnings.	1895	1896	Amounts	Percent- ages
Total amount paid in wages,	\$9,072,876 585.81		+\$658,633 +2.38	+7.26 +0.44

CLASSIFIED WEEKLY WAGES.

Classificati	ow c) P		1895		1896			
WREKLY W			Males	Females	Totals	Males	Females	Totals	
Under \$5,			915	66	981	1,098	86	1,184	
\$5 but under \$6,			883	108	991	826	87	913	
\$6 but under \$7,			1,229	132	1,361	1,192	117	1,309	
\$7 but under \$8,			1,920	40	1,960	1,857	46	1,903	
\$8 but under \$9,			1,864	35	1,899	1,847	46	1,893	
\$9 but under \$10,			2,426	28	2,454	2,664	29	2,693	
\$10 but under \$12,			2,869	12	2,881	2,973	15	2,988	
\$12 but under \$15,			4,201	4	4,205	4,442	4	4,446	
\$15 but under \$20,			2,800	1	2,801	3,084	2	3,086	
\$20 and over, .			667	1	668	694	-	694	
TOTALS, .			19,774	427	20,201	20,677	432	21,109	

PROPORTION OF BUSINESS DONE.

Proportion of Business Done and)	1895	1000	Increase Decrease (-	(十), or), in 1896
DAYS IN OPERATION.		1993	1896	Proportion and Days	Percent- ages
Average proportion of business done, . Average number of days in operation, .		59.08 297.55	56.78 292.16	-2.30 -5.39	-3.89 -1.81

No. 36.] INDUSTRY PRESENTATIONS.

www.libtool.com.cn

METALS AND METALLIC GOODS. 1895, 1896.

ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHMENTS CONSIDERED,						DERE	р,	1895	1896	Increase (+), De- crease (-), or No Change (=), in 1896		
	PARTNERS, ETC.				Number	Percent- ages						
Number of esta	blist	mer	ts 1	epor	ting,			382	382	=	-	
Number of priv	ate f	irms	,.					280	275	_5	-1.79	
Number of part	ners	,						421	405	-16	-3.80	
Males, .							.	406	386	-20	-4.93	
Females,								7	10	+3	+42.86	
Special,								8	2	-1	-33.33	
Estates,				•				5	7	+2	+40.00	
Number of corp	orat	ions	, .					102	107	+5	+4.90	
Number of stoc	khol	dere	, .		٠.			2,089	2,125	+86	+1.72	
Males, .								1,331	1,353	+22	+1.65	
Females,								599	597	2	-0.33	
Banks, trus	tees,	etc.	, .				.	159	175	+16	+10.06	
Aggregates: pa	rtne	rs aı	ıd s	tocki	ıolde	rs,	.	2,510	2,580	+20	+0.80	

CAPITAL INVESTED.

0	1895		Increase (+), or Decrease (-), in 1896		
CAPITAL INVESTED.	1989	1896	Amount	Percent- age	
Amount of capital invested,	\$ 19,177,9 4 0	\$17,633,004	-\$1,544,93 6	-8.06	

STOCK USED. AGGREGATE VALUES.

	1005		Increase (+), or Decrease (-), in 1896		
STOCK USED.	1895	1896	Amount	Percent- age	
Total value of stock used,	\$11,021,656	\$10,626,829	-\$395,327	-3.59	

GOODS MADE. AGGREGATE VALUES.

		1000	Increase (+), or Decrease (-), in 1896		
Goods Made.	1895	1896	Amount	Percent- age	
Total value of goods made and work done, .	\$24,484,118	\$23,472,316	-\$1,011,802	-4.18	

METALS AND METALLIC GOODS — 1895, 1896 — Continued. PERSONS EMPLOYED.

Persons Employed.									Increase (+), or Decrease (-), in 1896		
PERSO	78 E	MPLO	YED.				1895 1896		Number	Percent-	
Average number,							14,694	14,242	-452	-3.08	
Smallest number,							12,128	11,740	—388	-3.20	
Greatest number,							17,138	16,585	-608	-3.52	
Excess of greatest	ver	sma	llest	num	ber,	.	5,010	4,795	215	-4.29	

PERSONS EMPLOYED: BY MONTHS.

							1895		1896				
	M	ONTH	s. 			Males	Females	Totals	Males	Females	Totals		
January,						12,602	1,427	14,029	13,187	1,578	14,765		
February,						12,507	1,455	13,962	13,222	1,562	14,784		
March,						12,573	1,561	14,134	13,016	1,574	14,590		
April, .					.	12,628	1,592	14,220	12,969	1,546	14,515		
May, .						12,963	1,585	14,548	13,045	1,539	14,584		
June, .						13,042	1,562	14,604	12,806	1,461	14,267		
July, .					.	12,478	1,475	13,948	12,159	1,442	13,601		
August,						13,205	1,529	14,734	12,189	1,332	13,521		
September	,.					13,582	1,541	15,123	12,267	1,365	13,632		
October,						14,039	1,666	15,705	12,595	1,420	14,015		
November						13,986	1,663	15,649	12,706	1,465	14,171		
December,						13,817	1,689	15,506	12,527	1,463	13,990		
During the	en	tire 3	ear,	٠.		962	97	1,059	1,132	171	1,303		

^{* 78} establishments in 1895; 78 establishments in 1896.

WAGES AND EARNINGS.

Wage and Table				1007	1000	Increase (+), or Decrease (-), in 1896		
Wages and Earnings.					1895	1896	Amounts	Percent-
Total amount paid in wages, Average yearly earnings,.		:		•	\$7,479,648 509.08	\$7,218,118 506.82	-\$261,525 -2.21	-3.50 0.43

METALS AND METALLIC GOODS - 1895, 1896 - Concluded. CLASSIFIED WEEKLY WAGES.

Classification	ON C) P			1895			1896	
WEEKLY W				Males	Females	Totals	Males	Females	Totals
Under \$5,				1,015	490	1,506	887	511	1,398
\$5 but under \$6,			.	688	512	1,145	645	501	1,146
\$6 but under \$7,			.	1,052	846	1,398	971	364	1,835
\$7 but under \$8,			.	1,115	188	1,298	1,157	148	1,805
\$8 but under \$9,			.	1,088	101	1,184	1,084	69	1,108
\$9 but under \$10,			.	2,075	55	2,130	2,120	48	2,168
\$10 but under \$12,				2,260	46	2,306	2,124	44	2,168
\$12 but under \$15,			.	2,937	17	2,954	2,788	7	2,795
\$15 but under \$20,			.	2,298	5	2,303	2,890	2	2,392
\$20 and over, .			.	828	4	832	674	-	674
TOTALS, .				15,246	1,759	17,005	14,790	1,694	16,484

PROPORTION OF BUSINESS DONE.

Proportion of Business Done and	1005		Increase Decrease (-	(十), or ·), in 1896
DAYS IN OPERATION.	1895	1896	Proportion and Days	Percent- ages
Average proportion of business done, Average number of days in operation,	61.90 284.14	59.10 278.79	-2.80 -5.35	-4.52 -1.88

MUSICAL INSTRUMENTS AND MATERIALS. 1895, 1896.

ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISHS		NSID	ERE	D, 1895		1896	CREASE (Increase (+), De- crease (), or No Change (), in 1896		
PARTNERS, ETC.								Number	Percent- ages	
Number of establishmen	ts r	eport	ing,			.65	65	-	-	
Number of private firms,						46	45	-1	-2.17	
Number of partners,						67	67	=	-	
Males,						67	64	_3	-4.48	
Females,					.	-	1	+1	-	
Estates,						-	2	+2	-	
Number of corporations,						19	20	+1	+5.26	
Number of stockholders,						184	143	+9	+6.72	
Males,					.	109	112	+3	+2.75	
Females,					.	20	23	+8	+15.00	
Banks, trustees, etc.,					. }	5	8	+3	+60.00	
Aggregates : partners an	d st	tockh	olde	rs,	:	201	210	+9	+4.48	

STATISTICS OF MANUFACTURES. [Pub. Doc. 136

www.libtool.com.cn MUSICAL INSTRUMENTS AND MATERIALS — 1895, 1896 - Continued.

CAPITAL INVESTED.

Characa Turnana	1895	1896	Increase (+), or Decrease (-), in 1896	
CAPITAL INVESTED.		1980	Amount	Percent- age
Amount of capital invested,	\$3,595,336	\$3,192,496	-\$402,840	-11.20

STOCK USED. AGGREGATE VALUES.

0 V	1895	1000	INCREASE (+), OR DECREASE (-), IN 1896	
STOCK USED.		1896	Amount	Percent- age
Total value of stock used,	\$1,611,842	\$1,288,400	\$ 323,442	-20.07

GOODS MADE. AGGREGATE VALUES.

Good Winn	1895	1600	Increase (+), or Decrease (-), in 1896	
GOODS MADE.	1920	1896	Amount	Percent- age
Total value of goods made and work done, .	\$4,928, 873	\$3,922,418	-\$1,006,455	-20.42

PERSONS EMPLOYED.

Perso	'senz c					1895	1896	Increase (+), or Decrease (-), in 1896		
FERSO	NB E	MPLC	JIED.				1989	1990	Number	Percent- ages
Average number,							2,240	1,864	-376	-16.79
Smallest number,							1,937	1,376	-561	-28.96
Greatest number,							2,526	2,265	-261	-10.33
Excess of greatest over smallest number,						.	589	889	+300	+50.93

PERSONS EMPLOYED: BY MONTHS.

						1895			1896				
	M	ONTH	3.		Males	Females	Totals	Males	Females	Totals			
January,					2,116	102	2,218	2,031	99	2,130			
February,					2,128	101	2,229	2,035	100	2,135			
March,					2,086	106	2,192	2,053	98	2,151			
April, .					2,097	106	2,203	2,039	100	2,139			
May, .				.	2,037	105	2,142	1,949	99	2,048			
June, .				.	2,023	105.	2,128	1,502	60	1,562			

MUSICAL INSTRUMENTS AND MATERIALS — 1895, 1896 — Concluded.

PERSONS EMPLOYED: BY MONTHS - Concluded.

			_				1995			1896	
	M	ONTH	B.			Males	Females	Totals	Males	Females	Totals
July, .			•			2,039	102	2,141	1,395	51	1,446
August,						2,085	109	2,144	1,379	50	1,429
September	٠, .					2,213	111	2,324	1,459	54	1,513
October,						2,212	125	2,387	1,759	84	1,843
November	, .				.]	2,269	127	2,396	1,851	88	1,939
December	, .					2,265	128	2,393	1,871	91	1,962
During th	e en	tire y	ear,	٠.		840	50	390	158	4	162

^{* 13} establishments in 1895; 16 establishments in 1896.

WAGES AND EARNINGS.

W W. W	1895	1896	Increase (+), or Decrease (-), in 1896	
Wages and Earnings.	1993 1994		Amounts	Percent- ages
Total amount paid in wages,	\$1,400,562 625.25	\$1,143,827 613.87	-\$257,235 -11.88	-18.37 -1.90

CLASSIFIED WEEKLY WAGES.

CLASSIFICATI	ON C)F			1995		1896			
WEEKLY W	AGE.			Males	Females	Totals	Males	Females	Totals	
Under \$5,		•		67	85	102	69	85	104	
\$5 but under \$6,				69	72	141	68	52	115	
\$6 but under \$7,			- 1	83	11	94	95	11	106	
\$7 but under \$8,				95	7	102	88	4	92	
\$8 but under \$9,				101	2	103	90	2	92	
\$9 but under \$10,			.	167	1	168	114	2	116	
\$10 but under \$12,			.	238	8	241	248	8	251	
\$12 but under \$15,			.	585	1	586	554	-	554	
\$15 but under \$20,				735	-	785	635	-	635	
\$20 and over, .			.	248	_	243	177	- !	177	
TOTALS, .			.	2,383	182	2,515	2,188	109	2,242	

PROPORTION OF BUSINESS DONE.

Proportion of Business Done and			INCREASE (-	(+), or), in 1896
DAYS IN OPERATION.	1895	1896	Proportion and Days	Percent- ages
Average proportion of business done, Average number of days in operation,	58.14 289.28	58.77 272.94	-4.87 -16.99	-7.52 -5.87

138 STATISTICS OF MANUFACTURES. [Pub. Doc.

www.libtool.com.cn

PAPER AND PAPER GOODS. 1895, 1896. ESTABLISHMENTS, PARTNERS, ETC.

Number of Establishments Consider	KD,	1895	1896	Increase (+), De- CRKASE (-), OR No CHANGE (-), IN 1896	
Partners, etc.				Number	Percent- ages
Number of establishments reporting, .		123	123	_	-
Number of private firms,		44	40	-4	-9.09
Number of partners,		84	74	-10	-11.90
Males,		83	78	10	-12.05
Estates,	•	1	1	=	-
Number of corporations,		79	83	+4	+5.06
Number of stockholders,		1,541	1,692	+151	+9.80
Males,		1,004	1,092	+88	+8.76
Females,		446	476	+30	+6.73
Banks, trustees, etc.,		91	124	+33	+36.26
Aggregates: partners and stockholders,	-	1,625	1,766	+141	+8.68

CAPITAL INVESTED.

	1895		Increase (+), or Decrease (-), in 1896	
Capital Invested.		1896	Amount	Percent- age
Amount of capital invested,	\$24,682,633	\$23,670,894	-\$1,011,739	-4.10

STOCK USED. AGGREGATE VALUES.

	1895	1000	Increase (+), or Decrease (-), in 1896	
STOCK USED.		1896	Amount	Percent- age
Total value of stock used,	\$14,830,407	\$13,625,290	-\$1,205,117	-8.13

GOODS MADE. AGGREGATE VALUES.

C V	1895	1000	Increase (+), or Decrease (-), in 1896	
Goods Made.	1990	1896	Amount	Percent- age
Total value of goods made and work done, .	\$25,028,875	\$23,044,582	-\$1,983,793	7.98

PAPER AND PAPER GOODS—1895, 1896—Continued. PERSONS EMPLOYED.

P	17						1895	1896	Increase (+), or Decrease (-), in 1894		
PERSO	NS E	MPLO	YED.				1999	1894	Number	Percent-	
Average number,							11,647	11,112	-535	-4.59	
Smallest number,		•					10,356	9,514	-842	-8.18	
Greatest number,							12,558	12,243	815	-2.51	
Excess of greatest	Excess of greatest over smallest number							2,729	+527	+23.93	

PERSONS EMPLOYED: BY MONTHS.

							1895			1896	
	M) HTM	3.			Males	Females	Totals	Males	Females	Totals
January,			•	•		6,322	5,405	11,727	6,381	5,281	11,662
February,					.	6,249	5,453	11,702	6,347	5,178	11,525
March,						6,274	5,489	11,763	6,301	5,127	11,428
April, .					.	6,330	5,450	11,780	6,833	5,133	11,466
May, .					.	6,328	5,425	11,753	6,238	5,042	11,280
June, .					.	6,312	5,359	11,671	6,191	5,014	11,205
July, .					.	6,108	5,162	11,270	5,968	4,610	10,578
August,					.	6,135	5,126	11,261	5,935	4,427	10,362
September	,.				.	6,210	5,267	11,477	5,918	4,675	10,593
October,					.	6,401	5,446	11,847	6,015	4,868	10,883
November	, .				.	6,478	5,435	11,913	6,109	5,025	11,134
December,						6,381	5,204	11,585	6,216	5,035	11,251
During the	en	tire 3	ear,	٠.		847	413	1,260	773	465	1,238

^{* 16} establishments in 1895; 13 establishments in 1896.

WAGES AND EARNINGS.

	100=	1000	Increase (+), or Decrease (-), in 1896	
Wages and Earnings.	1895	1896	Amounts	Percent- ages
Total amount paid in wages, Average yearly earnings,	\$4,723,678 405.57	\$4,476,285 402.83	-\$247,393 -2.74	5.24 0.68

PAPER AND PAPER GOODS — 1895, 1896 — Concluded. CLASSIFIED WEEKLY WAGES.

Classificati	ON O)F			1895		1896			
WEEKLY W				Males	Females	Totals	Males	Females	Totals	
Under \$5,				231	1,546	1,777	232	1,396	1,628	
\$5 but under \$6,			.	172	1,504	1,676	186	1,378	1,564	
\$6 but under \$7,			.	872	1,492	1,864	845	1,577	1,922	
\$7 but under \$8,			.	754	631	1,385	648	596	1,244	
\$8 but under \$9,			.	760	333	1,093	721	273	994	
\$9 but under \$10,			. !	1,424	196	1,620	1,448	138	1,586	
\$10 but under \$12,				940	72	1,012	955	48	1,003	
\$12 but under \$15,			.!	1,104	17	1,121	1,065	16	1,081	
\$15 but under \$20,			.]	788	9	797	787	7	794	
\$20 and over, .				204	1	205	208	-	208	
TOTALS,			• .	6,749	5,801	12,550	6,595	5,429	. 12,024	

PROPORTION OF BUSINESS DONE.

Proportion of Business Done and	1005	1000	Increase (+), or Decrease (-), in 1896		
Days in Operation.	1895	1896	Proportion and Days	Percent- ages	
Average proportion of business done, Average number of days in operation,	73.96 287.34	70.77 272.56	-3.19 -14.78	-4.31 -5.14	

WOOLLEN GOODS. 1895, 1896.

ESTABLISHMENTS, PARTNERS, ETC.

Number of Estat				ONBII	ERE	D,	1895	1896	Increase (+), De- CREASE (-), OR NO CHANGE (=), IN 1896		
PAR	TNER	3, 1	itc.				122		Number	Percent- ages	
Number of establis	bmen	ts	report	ing,				122	=		
Number of private	firms	, .					87	86	_1	-1.15	
Number of partners	3,						143	145	+2	+1.40	
Males,						.	132	133	+1	+0.76	
Females, .							7	7	=	-	
Special, .							1	-	-1	-100.00	
Estates, .							3	5	+2	+66.67	
Number of corpora	tions	, .					35	36	+1	+2.86	
Number of stockhol	lders,	, .					1,192	1,216	+24	+2.01	
Males,						.	616	566	—50	-8.12	
Females, .						.	388	467	1 +79	+20.36	
Banks, trustees	, etc.	, .					188	183	5	-2.66	
Aggregates: partne	rs an	ıd e	tockh	olde	rs,		1,335	1,361	+26	+1.95	

WOOLLEN GOODS - 1895, 1896 - Continued.

CAPITAL INVESTED.

CAPITAL INVESTED.	1895	1896	Increase (+), or Decrease (-), in 1896	
CAFIIAL INVESTED.	1999	1886	Amount	Percent-
Amount of capital invested,	\$21,932,897	\$19,186,201	-\$2,746,696	-12.52

STOCK USED. AGGREGATE VALUES.

STOCK USED.	1895	1896	Increase (+), or Decrease (-), in 1896	
STOCK USED.	1950	1090	Amount	Percent- age
Total value of stock used,	\$14,410,166	\$11,393,040	-\$3,017,128	-20.94

GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1895	1896	Increase (+), or Decrease (-), in 1896		
GOODS MADE.	1990		Amount	Percent- age	
Total value of goods made and work done, .	\$24,899,606	\$19,662,182	-\$5,237,424	-21.08	

PERSONS EMPLOYED.

Preso	E						1005	1896	Increase (+), or Decrease (-), in 1896		
FRESO	NB E	MPLC	YED.				1895	1590	Number	Percent- ages	
Average number,							16,139	13,671	-2,468	-15.29	
Smallest number,						.	13,800	10,822	-2,978	-21.58	
Greatest number,						.	17,622	16,701	—921	-5.23	
Excess of greatest	sma	llest	num	ber,	.	3,822	5,879	+2,057	+53.82		

PERSONS EMPLOYED: BY MONTHS.

			_			1895			1896			
	M	ONTH	5.		Males	Females	Totals	Males	Females	Totals		
January,					9,796	5,444	15,240	9,393	5,312	14,705		
February,					9,917	5,586	15,503	9,678	5,420	15,098		
March,				.	10,280	5,649	15,929	9,867	5,586	15,453		
April, .				.	10,435	5,719	16,154	9,485	5,396	14,881		
May, .					10,569	5,906	16,475	9,155	5,258	14,418		
June, .				.	10,359	5,758	16,117	8,469	4,820	13,289		

WOOLLEN GOODS — 1895, 1896 — Concluded. PERSONS EMPLOYED: BY MONTHS — Concluded.

						1895		1896					
	Mc)NTH	5 .		Males	Females	Totals	Males	Females	Totals			
July, .				•	10,846	5,816	16,162	7,837	4,360	12,197			
August,					10,652	5,898	16,550	7,825	8,977	11,302			
September,					10,450	5,788	16,238	7,724	4,099	11,828			
October,					10,664	5,941	16,606	8,901	4,626	18,527			
November,					10,555	5,886	16,441	8,987	4,760	13,747			
December,					10,400	5,798	16,198	8,913	4,770	13,683			
During the	eni	ire v	ear.	٠.	1,061	636	1,697	982	563	1,545			

^{* 20} establishments in 1895; 16 establishments in 1896.

WAGES AND EARNINGS.

Wages and Earnings.	1895	1896	Increase (+), or Decrease (-), in 1896	
WAGES AND MAKRINGS.	1999	1920	Amounts	Percent- ages
Total amount paid in wages,	\$5,987,401 870.99	\$4,963,615 368.08	\$1,023,786 7.91	-17.10 -2.13

CLASSIFIED WEEKLY WAGES.

CLASSIFICAT	ON C	æ			1895		1896			
WEEKLY W		-		Males	Females	Totals	Males	Females	Totals	
Under \$5,		•		1,180	1,876	3,056	1,033	1,641	2,674	
\$5 but under \$6,				850	1,042	1,892	810	1,068	1,878	
\$6 but under \$7,				1,907	1,054	2,961	1,864	1,103	2,967	
\$7 but under \$8,				1,895	1,058	2,953	1,959	1,158	3,112	
\$8 but under \$9,				1,361	668	2,029	1,295	539	1,834	
\$9 but under \$10,			.	1,375	389	1,764	1,435	820	1,755	
\$10 but under \$12,			.	1,282	204	1,486	1,098	179	1,277	
\$12 but under \$15,				781	56	837	788	49	832	
\$15 but under \$20,				355	_	355	894	1	395	
\$20 and over, .				183	-	188	168	-	168	
TOTALS, .				11,169	6,347	17,516	10,839	6,053	16,892	

PROPORTION OF BUSINESS DONE.

Proportion of Business Done and	.	1895	1896	Increase (+), or Decrease (-), in 1896		
DAYS IN OPERATION.		1949	1990	Proportion and Days	Percent- ages	
Average proportion of business done, . Average number of days in operation, .	:	82.81 292.19	69.50 259.65	—13.31 —32.54	-16.07 11.14	

No. 36.] INDUSTRY PRESENTATIONS.

www.libtool.com.cn

WORSTED GOODS. 1895, 1896.

ESTABLISHMENTS, PARTNERS, ETC.

NUMBER OF ESTABLISH			ONSII	ERE	D,	1895	1896	Increase (+), De- crease (-), or No Change (), in 1896	
PARTNER	I ADIRBAD, BIO							Number	Percent- ages
Number of establishmen	ite :	repor	ting,			27	. 27	=	-
Number of private firms	٠, .					14	13	-1	-7.14
Number of partners,					.	31	28	_3	-9.68
Males,					.	25	24	-1	-4.00
Females,					.	1	1	=	-
Special,					•	5	8	—2	-40.00
Number of corporations	, .			•		13	14	+1	+7.69
Number of stockholder	١, .					494	501	+7	+1.42
Males,						313	809	-4	-1.28
Females,					.	180	130	=	-
Banks, trustees, etc	., .				.	51	62	+11	+21.57
Aggregates: partners a	nd	stocki	holde	rs,		525	529	+4	+0.76

CAPITAL INVESTED.

	1895	1000	Increase (+), or Decrease (), in 1896	
CAPITAL INVESTED.	1899	1896	Amount	Percent- age
Amount of capital invested,	\$15,700,666	\$15,343,809	\$356,857	-2.27

STOCK USED. AGGREGATE VALUES.

	1605		Increase (+), or Decrease (-), in 1896	
STOCK USED.	1895	1896	Amount	Percent- age
Total value of stock used,	\$13,138,003	\$10,861,550	-\$2,271,453	-17.30

GOODS MADE. AGGREGATE VALUES.

	1805		Increase (+), or Decrease (-), in 1896		
GOODS MADE.	1895	1896 .	Amount	Percent-	
Total value of goods made and work done, .	\$20,599,046	\$17,827,246	-\$2,771,800	-13.46	

144 STATISTICS OF MANUFACTURES. [Pub. Doc.

www.libtool.com.cn

WORSTED GOODS — 1895, 1896 — Continued. PERSONS EMPLOYED.

Persons Employed.							1005	1000	Increase (+), or Decrease (-), in 1896	
PERSO	NS E	MPLC	YED.				1895	1896	Number	Percent-
Average number,							12,297	11,318	—979	-7.96
Smallest number,							10,899	6,335	-4,564	-41.88
Greatest number,							18,273	13,618	+845	+2.60
Excess of greatest	over	sma	llest	num	ber,	.	2,374	7,283	+4,909	+206.98

PERSONS EMPLOYED: BY MONTHS.

							1895		1896				
	M	ONTH	s.			Males	Females	Totals	Males	Females	Totals		
January,			•			6,127	5,691	11,818	6,853	6,163	13,016		
February,						5,924	5,617	11,541	6,845	6,175	13,020		
March,		•			.	6,159	5,709	11,868	6,272	5,643	11,915		
April, .					.	6,398	5,917	12,315	6,402	5,624	12,026		
Мау, .					.	6,539	5,970	12,509	6,223	5,534	11,757		
June, .					.	6,536	5,924	12,460	5,252	4,838	10,090		
July, .						6,511	5,922	12,433	5,044	4,657	9,701		
August,					-	6,623	5,891	12,514	5,819	5,344	11,163		
September						6,617	5,835	12,452	5,693	5,160	10,853		
October,						6,718	5,941	12,659	5,091	4,507	9,598		
November,						6,794	6,115	12,909	5,923	5,230	11,153		
December,			•			6,272	5,771	12,043	5,874	5,643	11,517		
During the	en	tire y	ear,	٠.		42	19	61	42	18	60		

^{* 1} establishment in 1895; 1 establishment in 1896.

WAGES AND EARNINGS.

Wages and Earnings.		1895	1896	Increase (+), or Decrease (-), in 1896		
WAGES AND EARNINGS.			1399	1990	Amounts	Percent- ages
Total amount paid in wages, Average yearly earnings,			\$4,490,457 365.17	\$3,848,327 340.02	\$642,180 25.15	14.30 6.89

WWW.libtool.com.cn WORSTED GOODS — 1895, 1896 — Concluded. CLASSIFIED WEEKLY WAGES.

CLASSIFICATI	OF ()			1995		1996			
WEERLY W	AGE.			Males	Females	Totals	Make	Temales .	Total	
Under \$5,				790	1,912	2,992	764	1,748	2,54	
\$5 but under \$6,	-		-	717	1,940	2,217	749	1,346	2,84	
\$6 but under \$7,		-	-	1,664	1,548	2,107	1,154	1,444	2,54	
\$7 but under \$8,			-	1,273	993	1,954	1,2:7	614	1,47	
\$8 but under 🗱,		-	-	543	3V;	450	575	200	216	
\$9 but under \$16,	-	-	-	714	142	974	911	22/12	1/2	
110 but under \$12,	-		-	102	154	1,67:	1,622	143	1,34	
112 but under \$1.5,		-	-	725	24	712	T.2	25	46	
lá but under 🗱,		-	-	165	4	100	174	3	300	
20 and over, .	-	-	-	24	1	35 I	312	2	úl	
Totals, .		_	_	1,364	4,250	23,294	لملازة	4,144	12.5¥	

PROPORTION OF BUSINESS DONE

Рассившим не Винчане Вина для Виде ст Течаншин.	1445	1445	Primeriae Primeriae Milyana	Jan 19 Frenchis Januarita 1944
Average proportion of memors tone,	. 15.34	71.34	-14 3 8	-97.8g
Average number of tay+ in operation,	395 44	274.15	X. X	t /A

ALL INDUSTRIES, 1805, 1806.

ESTABLISHMENTS, PARTNERS, 2002

Угина не депавленчисть Іменьеван факторы, стр.	1445	1445	Santan sen		
		_	Syppe Services	.344 m3- .244 	
Sunder if sandilalments reporting,	. (40%	1.30%	. =		
Suniter të përvete irme	1.29	, ,905		: -9	
Summer of justmens.	معبق ۽	52	_na	-: 70	
Maiss		وتتر ،	_: (A	اد رس	
Females.	:50	.45	4.5	هد 1ند	
÷penni.	47	12	<u>ئىد</u>	_:: A	
Enter	7.0	~2		للد احد	
Sunfer if seriesulana	: ,2 a	1 770	4	و. است	
Sunface of anotheristation	4 195	يود, هـ	ذائر العا	، برصد از مصد	
Males.	202	工,但		عدراجيم	
F-transfere.	14 -47	14 770		فاررض	
Baniss Transcent etc	. ,99/	. ,65	-25		
Appropriate parties and destroiders	a "ag	. 12%	-1 23	و روس	

146 STATISTICS OF MANUFACTURES. [Pub. Doc.

www.libtool.com.cn ALL INDUSTRIES — 1895, 1896 — Continued.

CAPITAL INVESTED.

<u>.</u>		1000	Increase (+), or Decrease (-), in 1896		
CAPITAL INVESTED.	1895	1896	Amount	Percent- age	
Amount of capital invested,	\$390,932,763	\$373,582,161	-\$17,350,602	-4.44	

STOCK USED. AGGREGATE VALUES.

Occasi Mana	1007	1806	Increase ((+), or), in 1896
STOCK USED.	1895	1896	Amount	Percent-
Total value of stock used,	\$318,753,542	\$ 302,272,325	-\$16,481,217	5.17

GOODS MADE. AGGREGATE VALUES.

GOODS MADE.	1895	1896	Increase (+), or Decrease (-), in 1896		
GOODS MADE,	1993	1920	Amount	Percent- age	
Total value of goods made and work done, .	\$569,097,021	\$537,720,294	-\$31,376,727	-5.51	

PERSONS EMPLOYED.

Penecy	PERSONS EMPLOYED.						1895	1896	Increase (+), or Decrease (-), in 1896		
FERSON	PLO	I RD.				1050	1850	Number	Percent- ages		
Average number,	•					.	307,590	298,546	-9,044	-2.94	
Smallest number,						.	258,776	235,110	-23,666	-9.15	
Greatest number,						.	851,915	353,440	+1,525	+0.43	
Excess of greatest o	ver s	mal	lest:	num	ber,		93,139	118,830	+25,191	+27.05	

PERSONS EMPLOYED: BY MONTHS.

						1895		1896			
	М	ONTH	8.		Males	Females	Totals	Males	Females	Totals	
January,				•	195,170	104,282	299,452	202,454	106,043	308,497	
February,					195,196	104,909	800,105	204,140	106,973	811,113	
March,					198,678	106,391	805,069	204,501	106,642	311,143	
April, .					200,037	106,226	806,263	204,720	104,948	309,668	
May, .					204,100	106,502	810,602	205,399	104,624	310,023	
June, .					205,600	104,914	310,514	200,441	100,703	301,144	

WWWALL INDUSTRIES — 1895, 1896 — Concluded. PERSONS EMPLOYED: BY MONTHS — Concluded.

						1895			1896			
<u>1M</u>	ONT	NTHS.		Males	Females	Totala	Males	Females	Totals			
July,	•		•	•	202,415	101,120	303,535	192,237	93,631	285,868		
August, .					204,691	101,868	806,554	187,060	89,386	276,446		
September,.					206,678	104,155	310,833	188,436	92,861	281,297		
October, .					206,471	105,791	812,262	193,876	98,891	292,767		
November, .					206,339	106,715	313,054	194,893	100,627	295,520		
December, .					204,508	106,152	310,655	195,806	102,875	298,681		
During the er	itire	vear.	٠.		20,920	11,465	32,385	16,048	7,774	23,822		

^{* 942} establishments in 1895; 833 establishments in 1896.

WAGES AND EARNINGS.

WAGES AND EARNINGS.	1895	1896	Increase (+), or Decrease (-), in 1896	
WAGES AND CARNINGS.	1989	1980	Amounts	Percent- ages
Total amount paid in wages,	\$130,845,551 425.39		-\$3,932,179 -0,23	-3.01 -0.05

CLASSIFIED WEEKLY WAGES.

CLASSIFICAT	iox d	OF.			1895			1896			
WEEKLY V	AGE.	•		Males	Females	Totals	Males	Females	Totals		
Under \$5,	•		•	19,621	31,780	51,401	19,203	31,763	50,966		
\$5 but under \$6,				13,282	22,575	85,857	13,170	22,684	35,854		
\$6 but under \$7,				20,046	21,751	41,797	20,601	21,706	42,307		
\$7 but under \$8,				22,346	15,727	38,073	22,304	16,309	38,613		
\$8 but under \$9,				21,411	10,611	32,022	22,201	10,982	33,183		
\$9 but under \$10,				28,858	6,955	35,813	28,855	6,716	85,571		
\$10 but under \$12,				32,974	5,010	37,984	32,426	5,005	37,431		
\$12 but under \$15,				37,593	2,538	40,131	37,201	2,364	39,565		
\$15 but under \$20,				28,460	735	29,195	28,538	814	29,352		
\$20 and over, .	•			9,285	74	9,359	9,064	96	9,160		
TOTALS, .				233,876	117,756	351,632	233,563	118,439	352,002		

PROPORTION OF BUSINESS DONE.

Proportion of Business Done and	.	100	1896	Increase (+), or Decrease (-), in 1896		
DAYS IN OPERATION.		1895	1990	Proportion and Days	Percent- ages	
Average proportion of business done, . Average number of days in operation, .		62.56 291.56	58.98 279.43	-3.58 -12.13	-5.72 -4.16	

ANALYSIS.

[149]

ANALYSIS.

The statistical presentations contained in this volume are based upon the returns made by 4,609 identical establishments for each of the years 1895 and 1896.

Wherever the term, "All Industries," is used in this volume, it should be understood as referring only to the seventy-seven classified industries mentioned in the first table (pages 4 to 7), and must not be confounded with the total production of all the establishments engaged in the manufacturing and mechanical industries of the Commonwealth which is shown only once in ten years.

On pages 1 to 104 there will be found general statistics by industries, arranged under the sub-heads of Private Firms and Corporations; Partners and Stockholders; Capital Invested; Stock Used; Goods Made; Persons Employed; Wages Paid; and Proportion of Business Done and Days in Operation. The second section, pages 105 to 148, is devoted to detailed presentations for 15 leading industries, all of the statistical facts relating to each industry being grouped under its respective title. This analysis, however, deals only with the presentations contained in the first section, pages 1 to 104.

PRIVATE FIRMS AND CORPORATIONS; PARTNERS AND STOCKHOLDERS: BY INDUSTRIES.

This presentation will be found on pages 4 to 11. The number of establishments reporting in both of the years considered was 4,609. In 1895 these establishments were managed by 3,529 private firms and 1,036 corporations. In 1896, the number of private firms was reduced to 3,493, a decrease of 1.02 per cent, while the number of corporations increased to 1,070, an advance of 3.28 per cent.

The following table indicates the effect, in the aggregate, of the change from private firms to corporations in 1896 as compared with 1895:

	_		_				Num	BER	PERCENTAGES		
PRIVATE	Firi	KS AN	то Со	POP	RATIO	NS.	1895	1996	1895	1896	
Private firms,							8,529	8,493	77.81	76.55	
Corporations,			•		•	•	1,036	1,070	22.69	23.45	
TOTALS,							4,565	4,563	100.00	100.00	

From the above table it is seen that in 1895 private firms constituted 77.31 per cent of the entire number of establish-In 1896 this percentage decreased to 76.55. figures, as in the past, indicate the prevailing tendency toward the corporate form of management. As before stated, returns were received from 4,609 establishments. These establishments were managed in 1895 by 4,565 private firms and corporations, and in 1896 by 4,563 private firms and corporations. parent discrepancy is fully explained in the head-notes to the tables on pages 4, 5, 8, and 9. Duplications occur so far as private firms and corporations are concerned, for the reason that one firm may carry on two or more establishments in the same or in different towns or industries. The plan adopted in the statistical presentations is to consider each establishment, whether managed in connection with another or not, as a unit, and to credit to each industry its own number of private firms, partners, corporations, and stockholders; but, when considering the total for All Industries, to omit the duplicates. word "establishment," as used in this report, means the factory, mill, or shop from which a report was received, and not the firm or corporation owning or controlling said factory, mill, or shop. There are no duplications so far as the establishments are concerned.

The following table exhibits the number of duplications in private firms, corporations, partners, and stockholders for the years 1895 and 1896:

	PRIVAT	E FIRMS	Corpor	RATIONS	PAR	TNERS	Втоск и	OLDERS
Industries.	1895	1896	1895	1896	1895	1896	1895	1896
Boots and shoes,	-	-	1	1			8	8
Boxes (paper and wooden),	1	1	1	1	1	1	8	7
Carriages and wagons,	1	1	-	-	2	2	-	-
Cordage and twine,	-	-	1	1	-	-	6	6
Cotton goods,	-	-	4	4	-	-	107	109
Cotton, woollen, and other tex-	i i							
tiles,	-	-	1	1	-	-	504	510
Food preparations,	1	1	*4	*4	1	1	14	14
Hosiery and knit goods,	- 1	-	2	2	-	-	660	650
Leather,	2	2	1	1	5	5	75	78
Lumber,	1	1	-	-	2	2	-	_
Machines and machinery,	-	-	1	1	- 1	_	13	15
Metals and metallic goods,	2	2	- 1	- 1	8	3	-	-
Paper and paper goods,	-	-	4	4	-	-	37	38
Print works, dye works, and								
bleacheries,	_	-	8	8	-	-	722	724
Railroad construction and equip-			1 1					
ment,	-	-	†7	†7		-	7	7
Rubber and elastic goods,	1	1	'- I	1	1	1	_	41
Stone,	1	1	-	_	8	3	_	_
Woollen goods,	1	2	2	2	2	8	231	231
Worsted goods,	_	_	1	1	-	-	212	210
TOTALS,	11	12	33	84	20	21	2,604	2,648

^{*} Includes three syndicates.

Only the number of private firms and corporations and the number of partners and stockholders are affected by these duplications. The returns relative to capital invested, stock used, goods made, persons employed, wages paid, etc., are made separately for each establishment, and in the tabular presentations are credited to the industry to which they properly belong.

The total number of partners in 1895 was 5,577, falling in 1896 to 5,482, a decrease of 95, or 1.70 per cent. A classification of partners by sex is shown for each year in the following table:

						Nu	MBER	Percentages		
	1	PART	NERS.			1895	1896	1895	1896	
Males, .						5,342	5,283	95.79	95.46	
Females, .						130	1 145	2.33	2.64	
Special and e	tate	в, .	•			105	104	1.88	1.90	
TOTALS,					. [5,577	5,482	100.00	100.00	

[†] Railroads.

The males carrying on these private firms constituted 95.79 per cent of the whole number in 1895 and 95.46 per cent in 1896. The number of females rose from 130 to 145, constituting 2.33 per cent of the total number of partners in 1895, and 2.64 per cent in 1896.

The total number of stockholders in 1895 was 44.928, rising in 1896 to 46,143, an increase of 1,215, or 2.70 per cent.

The following table shows a classification of stockholders by sex:

							ļ	Num	BER	Percentages		
		ST	жн	OLDE	RS.			1895	1896	1895	1896	
Males,	•							25,682	26,528	57.05	57.49	
Females,							.	14,407	14,750	82.07	31.97	
Banks, tr	uste	es, e	tc.,					4,889	4,865	10.88	10.54	
Тота	LS,						.	44,928	46,143	100.00	100.00	

There is no great variation shown in the preceding table so far as the sex of the stockholders is concerned, practically 57 per cent being males in each year and 32 per cent females.

The next analysis table exhibits the effect of the change from the private firm to the corporation upon the number of partners in the aggregate and in the average.

		Number									
		1895	1896								
Private firms,		•	•							3,529	3,493
Partners, .									.	5,577	5,482
Average numbe	r of p	artn	ers t	a p	rivate	firm	, .		.	1.58	1.57
Corporations,									.	1,086	1,070
Stockholders,									.	44,928	46,143
Average numbe	r of	stock	hold	ers t	0 a co	rpor	tio	n, .	.	43.37	43.12

There is practically no change in the average number of partners to a private firm in 1895 and 1896. The average number of stockholders to a corporation in 1895 was 43.37 and in 1896, 43.12.

The returns relating to private firms, corporations, partners,

and stockholders for 1896 are condensed in the following summary: The returns represent 4,609 establishments found in 77 industries. The establishments are conducted by 3,493 private firms and 1,070 corporations, or, in other words, 76.55 per cent of the establishments are in the hands of private firms and 23.45 per cent in the hands of corporations. The private firms are managed by 5,482 persons, of whom 5,233, or 95.46 per cent, are males, 145, or 2.64 per cent, are females, and 104, or 1.90 per cent are special partners and estates. The corporations are managed by 46,143 persons, of whom 26,528, or 57.49 per cent, are males, 14,750, or 31.97 per cent, are females, and 4,865, or 10.54 per cent, are banks, trustees, etc. The average number of partners to a private firm is 1.57 and the average number of stockholders to a corporation, 43.12.

CAPITAL INVESTED: BY INDUSTRIES.

Comparison is made of the amount of capital invested in each of the 77 industries in 1895 and 1896 in the presentation on pages 14 and 15. The total amount of capital reported by the 4,609 establishments was \$390,932,763 in 1895 and \$373,-582,161 in 1896, a decrease in the latter year of \$17,350,602, or 4.44 per cent.

The following industries, 23 in number, show an increase in capital invested in 1896 as compared with 1895:

Awnings, Sails, Tents, etc.
Bicycles, Tricyles, etc.
Brick, Tiles, and Sewer Pipe.
Burial Cases, Caskets, Coffins, etc.
Carpetings.
Chemical Preparations (Compounded).
Corks, Bungs, and Taps.
Drugs and Medicines.
Emery and Sand Paper and Cloth, etc.
Fertilizers.
Flax, Hemp, Jute, and Linen Goods.
Glue, Isinglass, and Starch.
Hose: Rubber, Linen, etc.

Machines and Machinery.

Mixed Textiles.
Polishes and Dressing.
Print Works, Dye Works, and Bleacheries.
Railroad Construction and Equipment.
Scientific Instruments and Appliances.
Sporting and Athletic Goods.
Tobacco, Snuff, and Cigars.
Trunks and Valises.
Whips, Lashes, and Stocks.

The following 54 industries show a decrease in the amount of capital invested in 1896 as compared with 1895:

156 STATISTICS OF MANUFACTURES. [Pub. Doc.

www.libtool.com.cn

Agricultural Implements.

Arms and Ammunition.

Artisans' Tools.

Boots and Shoes.

Boxes (Paper and Wooden).

Brooms, Brushes, and Mops.

Buttons and Dress Trimmings.

Carriages and Wagons.

Cement, Kaolin, Lime, and Plaster.

Clocks, Watches, and Jewelry.

Clothing.

Cooking, Lighting, and Heating Ap-

paratus.

Cordage and Twine.

Cotton Goods.

 ${\bf Cotton, Woollen, and \ other \ Textiles.}$

Crayons, Pencils, Crucibles, etc.

Dyestuffs.

Earthen, Plaster, and Stone Ware.

 ${\bf Electrical\,Apparatus\,and\,Appliances.}$

Electroplating.

Fancy Articles, etc.

Fine Arts and Taxidermy.

Fireworks and Matches.

Food Preparations.

Furniture.

Glass.

Hair Work (Animal and Human).

Hosiery and Knit Goods.

Ink. Mucilage, and Paste.

Ivory, Bone, Shell, and Horn Goods, etc.

Leather.

Liquors and Beverages (Not Spirit-

uous).

Liquors: Malt, Distilled, and Fer-

mented.

Lumber.

Metals and Metallic Goods.

Models, Lasts, and Patterns.

Musical Instruments and Materials.

Oils and Illuminating fluids.

Paints, Colors, and Crude Chemicals.

Paper and Paper Goods.

Perfumes, Toilet Articles, etc.

Photographs and Photographic Materials.

Printing, Publishing, and Bookbinding.

Rubber and Elastic Goods.

Saddlery and Harness.

Shipbuilding.

Silk and Silk Goods.

Stone.

Straw and Palm Leaf Goods.

Tallow, Candles, Soap, and Grease.

Toys and Games (Children's).

Wooden Goods

Woollen Goods.

Worsted Goods.

The percentages of increase range from 0.11 in Print Works, Dye Works, and Bleacheries to 56.17 in Hose: Rubber, Linen, etc. The range of decrease is from 0.22 per cent in Toys and Games (Children's) to 21.91 per cent in Perfumes, Toilet Articles, etc.

The leading industries are brought forward into the following table:

Industries.				Number of Estab- lishments		NT OF INVESTED	Increase (+), or Decrease (-), in 189		
				Con- sidered	1895	1896	Amounts	Percent- ages	
Boots and shoes,				605	\$23,172,349	\$19,990,145	-\$3,182,204	-13.73	
Carpetings, .				12	6,008,497	6,020,485	+11,988	+0.20	
Cotton goods, .				169	116,141,614	112,902,817	-3,238,797	-2.79	

Industries.	Number of Estab- lishments		NT OF INVESTED	INCREASE (+), OR DECREASE (-), IN 1896		
	Con- sidered	1895	1896	Amounts	Percent- ages	
Leather,	. 148	\$8,479,094	\$ 7,329,970	-\$1,149,124	-13.55	
Machines and machinery, .	. 871	28,167,426	23,733,634	+566,208	+2.44	
Metals and metallic goods,	. 882	19,177,940	17,633,004	-1,544,936	8.06	
Paper and paper goods, .	. 128	24,682,633	23,670,894	-1,011,739	-4.10	
Woollen goods,	. 122	21,932,897	19,186,201	-2,746,696	-12.52	
Worsted goods,	. 27	15,700,666	15,343,809	-356,857	-2.27	
Other industries,	. 2,655	132,469,647	127,771,202	—4,698,44 5	8.55	
ALL INDUSTRIES, .	. 4,609	\$890,932,763	\$373,582,161	-\$17,350,602	-4.44	

The industries mentioned in detail in the above table are the principal industries of the State. The capital invested in the establishments returned in them was \$258,463,116 in 1895 and \$245,810,959 in 1896, or 66.11 per cent of the total capital for All Industries as returned for the year 1895, and 65.80 per cent in 1896. With the two exceptions of Carpetings and Machines and Machinery, a decrease in the amount of capital invested is shown for each of the nine leading industries.

In order that unwarranted deductions may not be made regarding increase or decrease in investment, as shown by these figures, it may be necessary to call attention, as in previous years, to the fact that the term, "capital," as used in these reports, does not mean merely cash capital or capital stock, but includes all forms of capital devoted to production, such as cash, value of buildings, land, machinery and fixtures, and stock on hand or in process of manufacture; therefore, the aggregate amounts given as capital invested in the different industries, include the actual capital of all forms found in the industry at the time of making the return, and it is obvious that some of the elements included are variable from year to year. A small amount of stock on hand or in process of manufacture at the time the return is made would have its effect in showing diminished capitalization, without, of course, affecting the condition of the industry; and, on the other hand, an investment in stock purchased in a favorable market, the same being held at the time of making the return, would render the amount of capital invested relatively larger than would be found at a time when the stock on hand was comparatively light.

STOCK USED: BY INDUSTRIES.

The term "stock used" includes all kinds of materials used in the establishment, whether entering into the fabric article or consumed in the processes necessary to the production of goods.

On pages 18 and 19 a comparison of the value of stock used in the 4,609 establishments making returns in each of the years 1895 and 1896 is shown. The table in detail requires no special analysis. In All Industries the total value of stock used was \$318,753,542 in 1895 and \$302,272,325 in 1896, a decrease of \$16,481,217, or 5.17 per cent.

For the purpose of comparing the nine leading industries, we present the following table:

Industries.	Number of Estab- lishments	VALUE OF 8	STOCK USED	Increase (—)	+), or , in 1896	
	Con- sidered	1895	1896	Amounts	Percent- ages	
Boots and shoes,	. 605	\$55,559,505	\$53,883,477	-\$1,676,028	-3.02	
Carpetings,	. 12	4,336,556	3,302,865	-1,083,691	-23.84	
Cotton goods,	. 169	46,244,435	50,297,985	+4,053,550	+8.77	
Leather,	. 143	15,746,203	13,127,769	-2,618,434	-16.63	
Machines and machinery, .	. 871	9,931,227	10,350,938	+419,711	+4.23	
Metals and metallic goods,	. 882	11,021,656	10,626,329	- 395,327	-8.59	
Paper and paper goods, .	. 128	14,830,407	13,625,290	-1,205,117	-8.13	
Woollen goods,	. 122	14,410,166	11,393,040	-8,017,126	-20.94	
Worsted goods,	. 27	13,133,003	10,861,550	-2,271,453	17.80	
Other industries,	. 2,655	133,540,384	124,803,082	-8,787,802	-6.54	
ALL INDUSTRIES, .	. 4,609	\$318,753,542	\$302,272,325	-\$16,481,217	-5.17	

The value of the stock used in 1895 in the establishments classified under the nine leading industry heads was \$185,213,-158, and in 1896, \$177,469,243, representing 58.11 per cent of the total stock used in All Industries in 1895, and 58.71 per cent in 1896.

GOODS MADE: BY INDUSTRIES.

The presentation on pages 22 and 23 shows a comparison of the value of goods made in the establishments supplying returns for the years 1895 and 1896. The total value of goods made and work done in the 4,609 establishments was, in 1895, \$569,097,021, and in 1896, \$537,720,294, a decrease in the last named year of \$31,376,727, or 5.51 per cent.

The following industries exhibit a decrease greater than that shown for All Industries:

Buttons and Dress Trimmings. Carpetings.

Carriages and Wagons.

Cement, Kaolin, Lime, and Plaster. Chemical Preparations (Compound-

ed).

Clocks, Watches, and Jewelry.

Clothing.

Cotton, Woollen, and other Textiles. Dyestuffs.

Earthen, Plaster, and Stone Ware. Electrical Apparatus and Appliances.

Fertilizers. Furniture.

Glass.

Hair Work (Animal and Human).

Hosiery and Knit Goods.

Ink, Mucilage, and Paste.

Ivory, Bone, Shell, and Horn Goods, etc.

Leather.

Liquors and Beverages (Not Spirituous).

Lumber.

Mixed Textiles.

Musical Instruments and Materials.

Paints, Colors, and Crude Chemicals.

Paper and Paper Goods.

Perfumes, Toilet Articles, etc.

Print Works, Dye Works, and Bleacheries.

Rubber and Elastic Goods.

Scientific Instruments and Appliances.

Shipbuilding.

Silk and Silk Goods.

Tallow, Candles, Soap, and Grease.

Tobacco, Snuff, and Cigars.

Trunks and Valises.

Whips, Lashes, and Stocks.

Wooden Goods.

Woollen Goods.

Worsted Goods.

In the following table we give the value of goods made and work done for the nine leading industries:

Industries.	Number of Estab- lishments	VALUE OF G		Increase (+), or Decrease (-), in 1896		
INDUSTRIES.	Con- sidered	1895	1896	Amounts	Percent- ages	
Boots and shoes,	605	\$89,938,212	\$87,945,168	-\$1,993,044	-2.22	
Carpetings,	. 12	7,213,798	5,674,637	-1,539,161	-21.34	
Cotton goods,	. 169	89,615,751	87,148,004	-2,469,747	-2.76	
Leather,	. 143	22,879,841	19,041,544	-3,338,297	-14.92	
Machines and machinery, .	. 871	26,027,029	28,489,920	+2,462,891	+9.46	
Metals and metallic goods,	. 382	24,484,118	23,472,316	-1,011,802	-4.13	
Paper and paper goods, .	123	25,028,875	28,044,582	-1,983,793	-7.93	
Woollen goods,	. 122	24,899,606	19,662,182	-5,237,424	-21.03	
Worsted goods,	. 27	20,599,046	17,827,246	-2,771,800	-13.46	
Other industries,	. 2,655	238,911,245	225,416,695	-13,494,550	-5.65	
ALL INDUSTRIES, .	. 4,609	\$569,097,021	\$537,720,294	-\$31,376,727	-5.51	

In 1895, the aggregate value of goods made and work done in these nine leading industries was \$330,185,776, and in 1896, \$312,303,599, representing 58.02 per cent of the total value of goods made and work done in All Industries in 1895, and 58.08 per cent in 1896. Only one of these leading industries, namely, Machines and Machinery, shows an increase in product.

In the following table we present the increase or decrease in value of goods made and work done each year, as shown by former published reports, beginning with the year 1886:

	Co	MPA	BATIV	e Yi	čars.		Number of Establish- ments Considered in Each Year	WORK DONE IN	DECREASE (—), DODS MADE AND EACH YEAR AS H THE PREVIOUS		
							Compared	Amounts Percentag			
1886, 1887,							1,027	+\$13,919,859	+5.29		
1887, 1888,							1,140	+11,168,095	+3.61		
1888, 1889,			•				1,364	+9,653,992	+2.45		
1889, 1890,							3,041	+22,838,970	+4.87		
1890, 1891,							3,745	+8,068,053	+1.33		
1891, 1892,							4,473	+33,180,865	+5.37		
1892, 1893,							4,397	-51,793,852	-8.10		
1893, 1894,							4,093	-56,793,448	-10.27		
1894, 1895,							3,629	+43,048,021	+9.18		
1895, 1896,							4,609	-31,376,727	-5.51		

The above table shows an increase in value of goods made and work done in 1887 as compared with 1886 of 5.29 per cent; in 1888 as compared with 1887, an increase of 3.61 per cent; in 1890 as compared with 1889, an increase of 2.45 per cent; in 1891 as compared with 1890, an increase of 4.37 per cent; in 1892 as compared with 1891, an increase of 5.37 per cent; in 1893 as compared with 1891, an increase of 5.37 per cent; in 1894 as compared with 1893, a decrease of 8.10 per cent; in 1895 as compared with 1894, an increase of 9.18 per cent; in 1896 as compared with 1895, a decrease of 5.51 per cent. The number of establishments reporting should be taken into consideration in comparing these returns, and it should be borne in mind that in any two comparative years, the returns made were those of identical establishments.

PERSONS EMPLOYED: BY INDUSTRIES.

The statistical presentations relative to persons employed will be found upon pages 25 to 64. In the analysis table which follows, we bring forward the figures representing the average number of persons employed during the years 1895 and 1896 for the nine leading industries, for other industries, and for All Industries in the aggregate:

Industries				Number of Estab- lishments	AVERAGE N PERSONS E DURING T	MPLOYED	OR DECRE.	BE (十), ASE (一), IN 96
		 		Con- sidered	1895	1896	Number	Percent- ages
Boots and shoes, .				605	43,180	42,263	-917	-2.12
Carpetings,			•	12	4,616	4,232	-384	-8.32
Cotton goods,				169	79,795	78,058	-1,737	-2.18
Leather,				148	7,168	6,347	-821	-11.45
Machines and machinery,				871	16,933	18,082	+1,149	+6.79
Metals and metallic goods	,			382	14,694	14,242	-452	-3.08
Paper and paper goods,				123	11,647	11,112	-535	-4.59
Woollen goods,				122	16,189	13,671	-2,468	-15.29
Worsted goods,				27	12,297	11,818	—97 9	-7.96
Other industries, .		•		2,655	101,121	99,221	1,900	-1.88
ALL INDUSTRIES,				4,609	307,590	298,546	-9,044	-2.94

The final line of the table indicates that in the 4,609 establishments making return, an average number of 307,590 persons were employed in All Industries during the year 1895, and 298,546 persons in 1896, a decrease of 9,044 persons, or 2.94 per cent. All the leading industries, except Machines and Machinery, show a decrease in 1896 as compared with 1895, the largest percentage of decrease being found in Woollen Goods, in which 16,139 persons, on an average, were employed in the 122 establishments making return in 1895 and 13,671 persons in 1896, a decrease of 15.29 per cent.

The table which follows gives the number of persons employed at the periods of employment of the smallest number in the nine leading industries:



162 STATISTICS OF MANUFACTURES. [Pub. Doc. www.libtool.com.cn

Industries	I.		Number of Estab- lishments	SMAI NUMBER OF EMPL	PERSONS	INCREASE (+), OR DECREASE (-), II 1896		
		 	Con- sidered	1895	1896	Number	Percent- ages	
Boots and shoes, .			605	83,362	32,679	683	-2.05	
Carpetings,			12	4,851	8,417	-934	-21.47	
Cotton goods,			169	73,778	66,044	-7,734	-10.48	
Leather,			143	5,737	5,018	—719	-12.53	
Machines and machinery,			371	13,449	14,259	+810	+6.02	
Metals and metallic goods	,		382	12,128	11,740	388	-3.20	
Paper and paper goods,		•	123	10,356	9,514	-842	-8.13	
Woollen goods,			122	13,800	10,822	-2,978	-21.58	
Worsted goods,			27	10,899	6,335	-4,564	-41.88	
Other industries, .			2,655	80,916	75,282	5,634	6.96	
ALL INDUSTRIES,			4,609	258,776	235,110	-23,666	-9.15	

The final line of the table indicates that 258,776 persons were employed at the periods of employment of the smallest number in 1895, and 235,110 persons at the corresponding periods in 1896, a decrease of 23,666 persons, or 9.15 per cent. All of the leading industries, except Machines and Machinery, show a decrease, the highest percentage of decrease being found in Worsted Goods.

A similar comparison for persons employed at the periods of employment of the greatest number is shown in the following table:

Industries	١.				Number of Estab- lishments	GREA NUMBER OF EMPL	F PERSONS	OR DECREA	9e (+), 18e (-), in 96
					Con- sidered	1895	1896	Number	Percent- ages
Boots and shoes,					605	52,063	51,998	65	-0.12
Carpetings,					12	4,794	4,791	-3	-0.06
Cotton goods,					169	83,545	86,494	+2,949	+3.58
Leather,					143	8,502	8,046	456	-5.36
Machines and machinery,	• .				371	20,228	21,348	+1,120	+5.54
Metals and metallic goods	,				382	17,138	16,535	603	-3.52
Paper and paper goods,					123	12,558	12,243	-315	-2.51
Woollen goods,					122	17,622	16,701	-921	5.23
Worsted goods,					27	13,273	13,618	+345	+2.60
Other industries, .		•			2,655	122,192	121,666	-526	-0.43
ALL INDUSTRIES,	•	•	•	•	4,609	351,915	353,440	+1,525	+0.43

As indicated by the figures in the last line of this table, 351,915 persons were employed in 1895 at the periods of employment of the greatest number, and at the corresponding periods in 1896, 353,440 persons were employed, an increase of 1,525, or 0.43 per cent. Three industries, namely, Cotton Goods, Machines and Machinery, and Worsted Goods, exhibit an increase in the greatest number of persons employed.

For the purpose of exhibiting the range of employment and unemployment year by year since 1886, as shown by these annual reports, the following table of percentages is given:

								PE	BCENTAGES	
C	COMP	ARATI	VE Y	'EARS	•		Number of Estab- lishments Con- sidered	Persons Employed at Periods of Employ- ment of Smallest Number of Persons Employed at Periods of Employment of Greatest Number	Range (Unemployed at some time During the Year)	Persons Em- ployed at Periods of En ployment of Greatest Number
1886, .							1,027	77.38	22.67	100.00
1887, .	•					•	1,027	78.57	21.43	100.00
1887, .							1,140	78.72	21.28	100.00
1888, .		•	•	•	•	•	1,140	77.18	22.82	100.00
1888, .							1,364	76.64	23.36	100.00
1889, .		•				•	1,364	79.52	20.48	100.00
1889, .							3,041	76.67	23.33	100.00
1890, .						•	3,041	78.05	21.95	100.00
1890, .		١.					3,745	77.91	22.09	100.00
1891, .							8,745	78.50	21.50	100.00
1891, .							4,478	77.52	22.48	100.00
1892, .							4,473	76.90	23.10	100.00
1892, .							4,397	77.66	22.34	100.00
1893, .							4,397	64.88	85.62	100.00
1893, .							4,093	65.17	34.83	100.00
l894, .				•			4,093	66.55	83.45	100.00
1894, .							3,629	67.11	32.89	100.00
1895, .							3,629	74.40	25.60	100.00
1895, .							4,609	73.53	26.47	100.00
1896, .							4,609	66.52	33.48	100.00

In order that these percentages may have their full effect, let it be borne in mind that if no persons were out of employment at any time during the year, in the establishments making return in the different industries, the percentage of persons



employed throughout the year would stand at 100; but, inasmuch as at the periods of employment of the smallest number, less persons are employed than at the periods of employment of the greatest number, the difference between the number of persons employed at these two periods may be represented by a percentage which indicates the number of persons unemployed at some time during the year, the duration of unemployment, of course, not being determined. This percentage is shown in the table in the third column.

It will be noted that from 1886 to 1892, the percentage of persons unemployed at some time during the year did not reach one-fourth of the greatest number of persons employed, while from 1893 to 1896 the percentages of unemployment materially increased, in several instances exceeding one-third of this greatest number.

The following table, brought forward from the presentation relating to persons employed by months, pages 37 to 63, exhibits the aggregate number of persons employed in each specified month together with the average number of persons employed per month in each of the 4,609 establishments:

		Mont	нв.				AGGREGATE PERSONS EMPLO SPECIFIEI	OYED IN EACH	Average Number of Persons Employed in Each Establishment in Each Specified Monte		
		1895	1896	1895	1896						
January,				•			299,452	308,497	6 5	67	
February,							800,105	811,113	65	68	
March,							305,069	311,143	66	68	
April, .							306,263	309,668	66	67	
Мау, .							810,602	810,023	67	64	
June, .							310,514	301,144	67	65	
July, .							303,535	285,868	66	62	
August,							306,554	276,446	67	60	
September	, .						310,833	281,297	67	61	
October,							312,262	292,767	68	64	
November	, .						813,054	295,520	68	64	
December,			•		•	:	310,655	298,681	67	65	

No large variation in the number of persons employed month by month is shown in the preceding table, the average number of persons per establishment being practically the

same, except for the months of July, August, and September of 1896.

To indicate more fully the range of unemployment, as shown by percentages, the following table for All Industries is presented:

	:	Mort	HS.			PERCENT EMPLOYMENT MONTHS 6	DUBING THE	PERCENTAGES OF UNEMPLOYMENT DURING TH MONTHS SPECIFIED		
					1895	1896	1895	1996		
January,	•					95.66	99.15	4.84	0.85	
February,					-	95.86	99.99	4.14	0.01	
March,						97.45	100.00	2.55	-	
April, .					. '	97.83	99.58	2.17	0.47	
May, .					- 1	99.22	99.64	0.78	0.36	
June, .					-	99.19	96.79	0.81	3.21	
July, .		•			.	96.96	91.88	8.04	8.12	
August,						97.92	88.85	2.08	11.15	
September	, .			•	•	99.29	90.41	0.71	9.59	
October,					. 1	99.75	94.09	0.25	5.91	
November	, .				. 1	100.00	94.98	-	5.02	
December,					- 1	99.23	95.99	0.77	4.01	

The number of persons employed in November, 1895 (this being the month of employment of the greatest number in that year), is considered 100 per cent; and the number of persons employed in March, 1896 (this being the month in which the greatest number of persons was employed in that year), is also considered 100 per cent. The percentages of unemployment during the other months are obtained by finding the difference between the percentages of employment appearing each month and 100 per cent. For instance, the smallest number of persons employed in 1895 is found in the month of January; the number employed in the month of November, as has been explained, constituted 100 per cent; the number employed in the month of January is represented by 95.66 per cent, the percentage of unemployment being the difference between 95.66 and 100 per cent, or 4.34 per cent. Again, the smallest number of persons employed in any single month in 1896 is found in August, the percentage indicating the smallest number being 88.85; the difference between this

and 100, namely, 11.15, indicates the percentage of unemployment in that month.

The reader may find it interesting to make similar comparisons for the other industries shown in the presentation, pages 37 to 63.

WAGES PAID: BY INDUSTRIES.

The statistical matter under this subject comprises three presentations, pages 65 to 98. The first relates to the total amount paid in wages in the 4,609 establishments during the years 1895 and 1896, the second to the average yearly earnings of each of the employes in these same establishments during the years specified, and the third to classified weekly wages.

WAGES PAID.

The facts relating to the total amount of wages paid are given on pages 67 and 68. In the following table are brought forward the figures for the nine leading industries:

Industries.	Number of Estab- lishments	in W	OUNT PAID AGES THE YEAR	Increase (+), or Decrease (-), in 1896		
	Con- sidered	1895	1896	Amounts	Percent- ages	
Boots and shoes,	. 605	\$20,838,632	\$20,834,331	\$4,301	-0.02	
Carpetings,	. 12	1,709,689	1,443,472	266,217	-15.57	
Cotton goods,	. 169	26,234,125	25,865,194	-368,931	-1.41	
Leather,	. 143	3,448,203	2,984,515	-463,688	-13.45	
Machines and machinery, .	. 371	9,072,876	9,731,509	+658,633	+7.26	
Metals and metallic goods, .	. 382	7,479,648	7,218,118	-261,525	-3.50	
Paper and paper goods, .	. 123	4,723,678	4,476,285	-247,393	-5.24	
Woollen goods,	. 122	5,987,401	4,963,615	-1,023,786	-17.10	
Worsted goods,	. 27	4,490,457	3,848,327	-642,130	-14.30	
Other industries,	. 2,655	46,860,847	45,548,006	-1,312,841	-2.80	
All Industries,	4,609	\$130,845,551	\$126,913,372	-\$3,932,179	-3.01	

In the 4,609 establishments making return, the total amount paid in wages during the year 1895 was \$130,845,551, and in 1896, \$126,913,372, showing a loss of \$3,932,179, or 3.01 per cent. Only one industry of the above nine, namely, Machines and Machinery, shows an increase. The largest percentages of decrease are found in Woollen Goods, Carpetings, Worsted Goods, and Leather.

AVERAGE YEARLY EARNINGS.

The average yearly earnings in the nine leading industries are brought forward in the following table from the presentation on pages 69 and 70:

Industries.		٠.	Number of Estab- lishments		erage Earnings	Increase (+), or Decrease (), in 1896		
	 		Con- sidered	1895	1896	Amounts	Percent- ages	
Boots and shoes,			605	\$482.60	\$492.97	+\$10.37	+2.15	
Carpetings,			12	370.38	341.09	-29.29	-7.91	
Cotton goods,			169	328.77	331.36	+2.59	+0.79	
Leather,			143	481.06	470.22	10.84	-2.25	
Machines and machinery,			871	535.81	538.19	+2.38	+0.44	
Metals and metallic goods,			382	509.03	506.82	-2.21	-0.43	
Paper and paper goods, .			123	405.57	402.83	-2.74	-0.68	
Woollen goods,			122	370.99	363.08	—7.91	-2.13	
Worsted goods,			27	865.17	340.02	-25.15	-6.89	
Other industries,			2,655	463.41	459.06	-4.35	-0.94	
ALL INDUSTRIES, .			4,609	\$425.39	\$425.16	-\$0.23	-0.05	

The averages in the preceding table are obtained by dividing the total amount of wages paid in each industry, as presented in the table on pages 67 and 68, by the aggregate average number of persons employed, without discrimination as to sex or age. Such an average is, of course, only useful in comparison with averages similarly obtained. The final line of this table reproduces the figures for All Industries. It will be noted that a very slight difference is seen when comparing 1896 with 1895, indicating that each of the employés received, on an average, \$425.39 in 1895, and \$425.16 in 1896, a decrease of 23 cents, or 0.05 per cent. Three industries, namely, Boots and Shoes, Cotton Goods, and Machines and Machinery, show increase in average yearly earnings.

CLASSIFIED WEEKLY WAGES.

Actual wage conditions in the different industries may, perhaps, be more accurately seen from the classified wage presentation, pages 71 to 97, than from aggregate or average

tables of wages. The following table brings forward such a classified wage presentation, with percentages for All Industries:

•									PERCEN	TAGES		
CLASSIFIC	ATIO	6 OI	WE	K K LY	WAG	3E.		18	395	1896		
								Males	Females	Males	Females	
Under \$5,								38.17	61.83	37.68	62.32	
\$5 but under	\$ 6,						.	37.04	62.96	36.73	63.27	
\$6 but under	\$7,						.	47.96	52.04	48.69	51.31	
\$7 but under	\$ 8,						. 1	58.69	41.31	57.76	42.24	
\$8 but under	\$ 9,						. 1	66.86	33.14	66.90	33.10	
\$9 but under	\$ 10,							80.58	19.42	81.12	18.88	
\$10 but under	\$ 12,						• 1	86.81	13.19	86.63	13.37	
\$12 but under	\$ 15,						•	93.68	6.32	94.03	5.97	
\$15 but under	\$2 0,						.	97.48	2.52	97.23	2.77	
\$20 and over,					•		•	99.21	0.79	98.95	1.05	
Totals,							. [66.51	33.49	66.35	83.65	

This table indicates that of the employés receiving less than \$5 per week, 38.17 per cent were males in 1895 and 37.68 per cent in 1896. The proportion of females in this class was 61.83 per cent in 1895 and 62.32 per cent in 1896. The proportion of males in each wage class increases after the \$5 but under \$6 wage limit is passed while the proportion of females correspondingly declines.

The fluctuations in the different wage classes are shown for All Industries in the following table:

						PERCE	NTAGES			
CLASSIFICATION O WAGE.	F W	EEKI	X		1895		1896			
WAGE.						Totals	Males	Females	Totals	
				100.00	100.00	100.00	100.00	100.00	100.00	
Under \$5,				8.39	26.99	14.62	8.22	26.82	14.48	
\$5 but under \$6,				5.68	19.17	10.20	5.64	19.15	10.19	
\$6 but under \$7,				8.57	18.47	11.89	8.82	18.33	12.02	
\$7 but under \$8,				9.55	13.36	10.83	9.55	13.77	10.97	
\$8 but under \$9,				9.16	9.01	9.11	9.51	9.27	9.43	
\$9 but under \$10,				12.34	5.91	10.18	12.35	5.67	10.10	
\$10 but under \$12,			.	14.10	4.25	10.80	13.88	4.22	10.63	
\$12 but under \$15,			.	16.07	2.16	11.41	15.93	2.00	11.24	
\$15 but under \$20,				12.17	0.62	8.30	12.22	0.69	8.34	
\$20 and over			. 1	3.97	0.06	2.66	3.88	0.08	2.60	

In this table, the total number of males, the total number of females, and the total number of employés of both sexes are

each considered as representing 100 per cent, and the number of employés in each wage class constitute parts of this aggregate, or in other words, are represented by percentages which totalize to 100. That class in which the proportion of sexes is about the same in each year is the class receiving \$8 but under \$9 per week. The percentages of males in this class in 1895 and 1896 were 9.16 and 9.51 respectively, and of females, 9.01 and 9.27, respectively. The percentages of males and females do not materially vary in either year.

PROPORTION OF BUSINESS DONE: BY INDUSTRIES.

The statistical matter relating to this subject, which covers proportion of business done and average number of days in operation, will be found on pages 99 to 104.

Proportion of Business Done.

In computing the proportion of business done, maximum production, that is to say, the greatest amount of goods that can be turned out with the present facilities, is considered 100 per cent. In the 4,609 establishments making return in each year, the average proportion of business done in 1895 is represented by 62.56 per cent and in 1896 by 58.98 per cent.

The following table reproduces the average proportion of business done for the nine selected industries:

Industries	١.		Number of Estab- lishments	POR	BE PRO- TION ESS DONE	Increase (+), or Decrease (-), in 1896		
			 Con- sidered	1895	1896	Proportion	Percent- ages	
Boots and shoes, .			605	62.04	58.61	-3.43	-5.53	
Carpetings,			12	73.50	68.25	5.25	-7.14	
Cotton goods,			169	87.22	77.33	-9.89	-11.34	
Leather,			148	66.51	58.35	-8.16	-12.27	
Machines and machinery,			371	59.08	56.78	-2.30	-3.89	
Metals and metallic goods	,		382	61.90	59.10	-2.80	-4.52	
Paper and paper goods,			123	73.96	70.77	-3.19	-4.31	
Woollen goods,			122	82.81	69.50	-13.31	-16.07	
Worsted goods,			27	85.56	70.30	-15.26	-17.84	
Other industries, .			2,655	59.74	57.03	-2.71	-4.54	
ALL INDUSTRIES,			4,609	62.56	58.98	-3.58	-5.72	

It will be noted from an examination of the preceding table that production in the nine leading industries in 1896 ranged

from about one-half to nearly eight-tenths of the full capacity of the establishments and in comparison with 1895 each industry shows a decline in average proportion of business done.

DAYS IN OPERATION.

The statistical presentation relating to this division of the subject will be found on pages 102 and 103. The average number of days in operation for All Industries in 1895 was 291.56, and in 1896, 279.43, a decrease of 12.13 days, or 4.16 per cent.

In the following table we bring forward the facts for the nine leading industries:

Industries			Number of Estab- lishments	of l	NUMBER DAYS RATION	Increase (+), or Decrease (-), in 1896		
		 	 Con- sidered	1895	1896	Days	Percent-	
Boots and shoes, .			605	284.64	282.30	-2.34	-0.82	
Carpetings,			12	299.63	241.14	-58.49	-19.52	
Cotton goods,			169	297.36	279.53	-17.83	-6.00	
Leather,			143	294.73	286.13	-8.60	-2.92	
Machines and machinery,			371	297.55	292.16	-5.39	-1.81	
Metals and metallic goods	,		382	284.14	278.79	-5.35	-1.88	
Paper and paper goods,			123	287.34	272.56	-14.78	-5.14	
Woollen goods,			122	292.19	259.65	-32.54	-11.14	
Worsted goods,			27	305.64	279.35	-26.29	-8.60	
Other industries, .			2,655	288.09	280.60	—7.49	-2.60	
ALL INDUSTRIES,			4,609	291.56	279.43	-12.13	-4.16	

It will be noted that each of these nine industries exhibits a falling off in the number of days in operation in 1896 as compared with 1895, Carpetings leading, with a loss of 58.49 days.

The total number of working days in 1896, exclusive of 52 Sundays and 7 holidays, was 307. The average number of working days in a month was, therefore, 25.58. The following industries show a loss of more than one month but less than two months, on an average, in 1896 as compared with 1895:

Dyestuffs.
Earthen, Plaster, and Stone Ware.
Glass.
Mixed Textiles.

Silk and Silk Goods. Trunks and Valises. Woollen Goods. Worsted Goods.

Carpetings is the only industry which shows a loss of more than two months, on an average, in 1896 as compared with 1895.

Two industries, namely, Fireworks and Matches and Lumber, show a gain of more than one month but less than two months, on an average, in 1896 as compared with 1895.

SUMMARY.

The tables which follow bring before the reader the leading factors relative to the condition of the various industries in 1895 and 1896. For convenience in reviewing, the 77 industries are separated into classes. The first class comprises those industries which show an increase in the average number of days in operation and in the average proportion of business done in 1896 as compared with 1895; the second class, those industries which show an increase in the average number of days in operation but a decrease in the average proportion of business done; the third class, those industries which show a decrease in the average proportion of business done; and the fourth and last class, those industries which show a decrease in the average number of days in operation but a greater average proportion of business done; and the fourth and last class, those industries which show a decrease in the average number of days in operation and in the average proportion of business done.

In the analysis of these classes, the percentages of increase or decrease in the proportion of business done are based upon the total productive capacity of the establishments and not upon the aggregate value of goods manufactured in 1896.

The table relating to the first class follows:

·		Increase (+), or Decrease (-), in 1896 as Compared with 1895 in—								
Industries.		Average Number of Days in Operation	Average Proportion of Busi- ness Done	Average Yearly Earnings	Average Number of Persons Employed	"Range"				
Arms and ammunition,		+4.52	+2.58	+\$31.58	_64	+112				
Brick, tiles, and sewer pipe,		+14.46	+2.66	-2.14	+62	+104				
Fireworks and matches,		+37.98	+2.25	-15.19	+11	-20				
Printing, publishing, and bookbinding	ζ,	+10.11	+0.17	+6.65	-7	-41				
Railroad construction and equipment,		+0.59	+6.94	+21.17	+420	+314				
Shipbuilding,		+8.16	+1.49	+4.22	+6	+14				

The industries which are grouped in this table are those which show an increase in the average number of days in operation and also in the average proportion of business done. Four of these industries show an increase in average yearly earnings, namely, Arms and Ammunition; Printing, Publishing, and Bookbinding; Railroad Construction and Equipment; and Shipbuilding. An increase in average number of persons employed is shown for Brick, Tiles, and Sewer Pipe; Fireworks and Matches; Railroad Construction and Equipment; and Shipbuilding.

The difference in the range of unemployment is greater in 1896 than in 1895 in Arms and Ammunition; Brick, Tiles, and Sewer Pipe; Railroad Construction and Equipment; and Shipbuilding; it is narrower in Fireworks and Matches and Printing, Publishing, and Bookbinding.

Industries of the second class are grouped in the following table:

	Increase (+), or Decrease (-), in 1896 as Compared with 1895 in -						
Industries.	Average Number of Days in Operation	Average Proportion of Busi- ness Done	Average Yearly Earnings	Average Number of Persons Employed	"Range"		
Cement, kaolin, lime, and plaster,	+10.65	-0.30	+\$8.29	-1	+13		
Cooking, lighting, and heating apparatus,	+3.12	-2.86	-23.78	+89	138		
Drugs and medicines,	+1.95	-4.63	-4.03	-23	-39		
Electroplating,	+4.74	-3.66	+35.38	+9	+9		
Fertilizers,	+1.84	-1.66	-1.39	+2	*_		
Hose: rubber, linen, etc.,	+1.45	-4.50	-42.85	+212	+186		
Lumber,	+25.76	-6.18	+13.65	-40	-21		
Oils and illuminating fluids,	+0.27	-1.67	-10.66	+14	+54		
Polishes and dressing,	+4.94	-3.39	-35.81	*-	-36		
Scientific instruments and appliances, .	+4.18	-3.25	+25.25	+30	+14		
Toys and games (children's),	+0.23	-2.37	-16.28	+26	*-		

^{*} No change.

The above industries are those which show an increase in the average number of days in operation and a decrease in the average proportion of business done. Of these industries, the following show an increase in average yearly earnings:

Cement, Kaolin, Lime, and Plaster. Scientific Instruments and Appli-Electroplating. ances. Lumber.

Those showing a decrease in average yearly earnings are:

Cooking, Lighting, and Heating Apparatus. Drugs and Medicines. Fertilizers. Hose: Rubber, Linen, etc.
Oils and Illuminating Fluids.
Polishes and Dressing.
Toys and Games (Children's).

In Polishes and Dressing, no change in the average number of persons employed in 1896 as compared with 1895 appears; and, with the further exception of Cement, Kaolin, Lime, and Plaster; Drugs and Medicines; and Lumber, an increase is shown for all the industries in this class.

The range of unemployment was wider in 1896 than in 1895 in but five industries in this class, namely, Cement, Kaolin, Lime, and Plaster; Electroplating; Hose: Rubber, Linen, etc.; Oils and Illuminating Fluids; and Scientific Instruments and Appliances. In Fertilizers and Toys and Games (Children's), there was no variation in the range of unemployment in 1896, while a narrower range was shown for Cooking, Lighting, and Heating Apparatus; Drugs and Medicines; Lumber; and Polishes and Dressing.

Industries of the third class are presented in the following table:

		Increase (+), or Decrease (-), in 1896 as Compared with 1895 in -							
Industries.		Average Number of Days in Operation	Average Proportion of Busi- ness Done	Average Yearly Earnings	Average Number of Persons Employed	"Range"			
Agricultural implements,	.	-4.19	+0.38	-\$23.12	+25	+148			
Cordage and twine,	.	-4.92	+1.69	+13.21	+91	+134			
Corks, bungs, and taps,	.	-5.57	+8.33	-2.35	+7	+20			
Earthen, plaster, and stone ware, .	.	-29.35	+2.42	-16.34	-21	-[9			
Electrical apparatus and appliances,	.	-1.34	+1.66	-14.58	-230	-107			
Fancy articles, etc.,	.	-7.60	+1.37	+4.74	5	+38			
Fine arts and taxidermy,	.	-4.18	+5.67	-12.67	+5	-2			
Flax, hemp, jute, and linen goods, .	.	-22.85	+2.80	-20.36	+3	+211			
Glue, isinglass, and starch,	.	-17.99	+3.09	-31.76	+50	+116			
Liquors: malt, distilled, and fermented,	.	-0.98	+1.04	+2.33	+68	-13			
Saddlery and harness,	$\cdot \mid$	-8.48	+0.44	-7.95	-17	+10			

The above industries are those which show a decrease in the average number of days in operation but a greater average proportion of business done. With the exception of three indus-

tries, namely, Cordage and Twine; Fancy Articles, etc.; and Liquors: Malt, Distilled, and Fermented, a decrease is shown in average yearly earnings. An increase in the average number of persons employed is shown for all of the industries in this class, except Earthen, Plaster, and Stone Ware; Electrical Apparatus and Appliances; Fancy Articles, etc.; and Saddlery and Harness.

The range of unemployment was wider in Agricultural Implements; Cordage and Twine; Corks, Bungs, and Taps; Earthen, Plaster, and Stone Ware; Fancy Articles, etc.; Flax, Hemp, Jute, and Linen Goods; Glue, Isinglass, and Starch; and Saddlery and Harness and narrower in Electrical Apparatus and Appliances; Fine Arts and Taxidermy; and Liquors: Malt, Distilled, and Fermented.

The final table presents the industries of the fourth class:

	Increa	ASE (+), OI	DECREASI	3 (), IN 18	896 AS
Industries.	Average Number of Days in Operation	Average Proportion of Busi-	Averege	Average Number of Persons Employed	"Range"
Artisans' tools,	-0.23	-3.53	+\$10.40	+85	+58
Awnings, sails, tents, etc.,	-0.22	-0.91	-52.50	-6	-22
Bicycles, tricycles, etc.,	-1.25	-10.10	+39.85	-43	+888
Boots and shoes,	-2.34	-3.43	+10.37	-917	+618
Boxes (paper and wooden),	-7.66	-2.05	-6.06	-116	202
Brooms, brushes, and mops,	-11.37	-5.00	+4.43	6	+120
Burial cases, caskets, coffins, etc.,	-1.20	-6.00	+8.10	-3	15
Buttons and dress trimmings,	-13.82	-6.54	-20.21	+7	+171
Carpetings,	-58.49	-5.25	-29.29	-384	+931
Carriages and wagons,	-10.87	-3.80	-2.40	-201	39
Chemical preparations (compounded), .	-6.32	—7.83	+4.27	13	+18
Clocks, watches, and jewelry,	-16.21	-6.21	-15.83	-279	+82
Clothing,	-12.12	-4.09	-28.30	295	+217
Cotton goods,	-17.83	-9.89	+2.59	-1,737	+10,683
Cotton, woollen, and other textiles,	-14.50	-27.50	-10.68	+119	+252
Crayons, pencils, crucibles, etc.,	-5.05	-12.50	+46.42	5	9
Dyestuffs,	-49.44	14.63	-27.81	-26	+57
Emery and sand paper and cloth, etc., .	-2.01	-4.40	-9.58	+50	+40
Food preparations,	-1.05	-0.75	+4.18	+75	516
Furniture,	-3.80	-2.84	-9.77	209	+54
Glass,	-28.89	∸10.43	-40.32	-46	+216
Hair work (animal and human),	-1.73	-5.57	-46.79	-4	+3
Hosiery and knit goods,	-10.37	-5.60	-28.10	+41	+347
Ivory, bone, shell, and horn goods, etc., .	-3.60	-6.12	-8.48	-110	108
Leather,	-8.60	-8.16	-10.84	821	+263
Liquors and beverages (not spirituous), .	-2.62	-4.72	-15.81	15	-28
Machines and machinery,	-5.39	-2.30	+2.38	+1,149	+310

,	Increa	Increase (+), or Decrease (-), in 1896 as Compared with 1895 in -						
Industries.	Average Number of Days in Operation	Average Proportion of Busi- ness Done	Average Yearly Earnings	Average Number of Persons Employed	"Range"			
Metals and metallic goods,	-5.35	-2.80	-2.21	-452	—21 5			
Mixed textiles,	-35.34	-10.16	18.60	-47	+127			
Models, lasts, and patterns,	-4.12	-2.10	5.90	+11	+25			
Musical instruments and materials,	-16.99	-4.37	-11.88	-876	+300			
Paints, colors, and crude chemicals,	-11.95	-3.74	+29.29	-34	-14			
Paper and paper goods,	-14.78	-3.19	-2.74	535	+527			
Perfumes, toilet articles, etc.,	-10.38	-7.50	+16.29	-4	-5			
Photographs and photographic materials,	11.08	-1.17	-19.69	+29	+12			
Print works, dye works, and bleacheries,	16.38	-4.49	-4.61	-157	+674			
Rubber and elastic goods,	-17.16	—7.15	-7.08	-402	+902			
Silk and silk goods,	-37.32	-5.00	+4.04	-230	+329			
Sporting and athletic goods,	-20.38	-5.55	-6.92	+14	+140			
Stone,	-0.66	-1.76	+10.10	-13	+142			
Straw and palm leaf goods,	-1.60	-0.43	+28.31	-146	+96			
Tallow, candles, soap, and grease,	-6.36	-4.43	-3.95	_7	+11			
Tobacco, snuff, and cigars,	-3.45	-2.40	+1.54	-66	-34			
Trunks and valises,	-39.25	15.85	+7.13	17	+6			
Whips, lashes, and stocks,	-24.23	-17.20	-23.10	-35	+5			
Wooden goods,	-2.36	-4.12	+5.01	-137	-252			
Woollen goods,	-32.54	-13.31	-7.91	-2,468	+2,057			
Worsted goods,	-26.29	-15.26	-25.15	-979	+4,909			

The industries grouped in the above table show a decrease both in average number of days in operation and in average proportion of business done. All of the nine leading industries are included in this class. The following industries show an increase in average yearly earnings:

Artisans' Tools.
Bicycles, Tricycles, etc.
Boots and Shoes.
Brooms, Brushes, and Mops.
Burial Cases, Caskets, Coffins, etc.
Chemical Preparations (Compounded).
Cotton Goods.
Crayons, Pencils, Crucibles, etc.
Food Preparations.

Machines and Machinery.
Paints, Colors, and Crude Chemicals.
Perfumes, Toilet Articles, etc.
Silk and Silk Goods.
Stone.
Straw and Palm Leaf Goods.
Tobacco, Snuff, and Cigars.
Trunks and Valises.
Wooden Goods.

Those showing a decrease in average yearly earnings are:

Awnings, Sails, Tents, etc. Boxes (Paper and Wooden). Buttons and Dress Trimmings. Carpetings.
Carriages and Wagons.
Clocks, Watches, and Jewelry.

176 STATISTICS OF MANUFACTURES. [Pub. Doc.

www.libtool.com.cn

Clothing.

Cotton, Woollen, and other Textiles.

Dvestuffs.

Emery and Sand Paper and Cloth,

etc.

Furniture.

Glass.

Hair Work (Animal and Human).

Hosiery and Knit Goods.

Ivory, Bone, Shell, and Horn Goods,

Leather.

Liquors and Beverages (Not Spirit-

uous)

Metals and Metallic Goods.

Mixed Textiles.

Models, Lasts, and Patterns.

Musical Instruments and Materials.

Paper and Paper Goods.

Photographs and Photographic Materials.

Print Works, Dye Works, and Bleacheries.

Rubber and Elastic Goods.

Sporting and Athletic Goods.

Tallow, Candles, Soap, and Grease.

Whips, Lashes, and Stocks.

Woollen Goods.

Worsted Goods.

A decrease in the average number of persons employed is shown for all of the industries except the following:

Artisans' Tools.

Buttons and Dress Trimmings.

Cotton, Woollen, and other Textiles.

Emery and Sand Paper and Cloth, etc.

Food Preparations.

Hosiery and Knit Goods.

Machines and Machinery.
Models, Lasts, and Patterns.

Photographs and Photographic Ma-

terials.

Sporting and Athletic Goods.

The range of unemployment in 1896 as compared with 1895 was wider in the following industries:

Artisans' Tools.

Bicycles, Tricycles, etc.

Boots and Shoes.

Brooms, Brushes, and Mops.

Buttons and Dress Trimmings.

Carpetings.

Chemical Preparations (Compound-

ed)

Clocks, Watches, and Jewelry.

Clothing.

Cotton Goods.

Cotton, Woollen, and other Textiles.

Dyestuffs

Emery and Sand Paper and Cloth, etc.

Furniture.

Glass.

Hair Work (Animal and Human).

Hosiery and Knit Goods.

Leather.

Machines and Machinery.

Mixed Textiles.

Models, Lasts, and Patterns.

Musical Instruments and Materials.

Paper and Paper Goods.

Photographs and Photographic Materials.

Print Works, Dye Works, and Bleacheries.

Rubber and Elastic Goods.

Silk and Silk Goods.

Sporting and Athletic Goods.

Stone.

Straw and Palm Leaf Goods.

Tallow, Candles, Soap, and Grease.

Trunks and Valises.

Whips, Lashes, and Stocks.

Woollen Goods.

Worsted Goods.

Those showing a narrower range of unemployment are:

Awnings, Sails, Tents, etc.
Boxes (Paper and Wooden).
Burial Cases, Caskets, Coffins, etc.
Carriages and Wagons.
Crayons, Pencils, Crucibles, etc.
Food Preparations.
Ivory, Bone, Shell, and Horn Goods, etc.

Liquors and Beverages (Not Spirituous).

Metals and Metallic Goods.

Paints, Colors, and Crude Chemicals.

Perfumes, Toilet Articles, etc.

Tobacco, Snuff, and Cigars.

Wooden Goods.

In Ink, Mucilage, and Paste, an increase in the average number of days in operation, and no change in proportion of business done is shown, together with an increase in average yearly earnings, a decrease in the average number of persons employed, and a narrower range of unemployment.

In the next table is given a graphic portrayal of the condition in each industry in 1896 as compared with 1895, with respect to the amount of capital invested, value of goods made and work done, amount paid in wages during the year, and average number of persons employed. An increase in any of these items is indicated by the sign (+), a decrease by the sign (—), and no change by the sign (—).

	Increase (+), Decrease (-), or No Change (-), in 1896 as Compared with 1895 in -					
Industries.	Amount of Capital Invested	Value of Goods Made and Work Done	Total Amount Paid in Wages	Average Number of Persons Employed		
Agricultural implements,		_	+,	-	+	
Arms and ammunition,		_	+	+	_	
Artisans' tools,	•	_	+	+	+	
Awnings, sails, tents, etc.,		+	-	_	_	
Bicycles, tricycles, etc.,		+	_	+	_	
Boots and shoes,		_	· -	-		
Boxes (paper and wooden),		_	_	_	. —	
Brick, tiles, and sewer pipe,		+	+	+	+	
Brooms, brushes, and mops,		_	_	+	_	
Burial cases, caskets, coffins, etc., .		+	_	_	_	
Buttons and dress trimmings,		<u> </u>	_		+	
Carpetings,		+	_			
Carriages and wagons,		<u> </u>	l _	_	l –	
Cement, kaolin, lime, and plaster,		_	l _	+	_	
Chemical preparations (compounded),	•	+	l _		_	
Clocks, watches, and jewelry,	•	<u> </u>	_	_	_	
Clothing,	•		_			
Cooking, lighting, and heating apparatus,	•	_	=	+	+	

		INCREASE (-	+), Decrease 6 as Compan	(-), or No	Change (—), 95 in —
Industries.		Amount of Capital Invested	Value of Goods Made and Work Done	Total Amount Paid in Wages	Average Number of Persons Employed
Cordage and twine,		_	+	+	+
Corks, bungs, and taps,		+	+	+	+
Cotton goods,		_	-	_	-
Cotton, woollen, and other textiles, .	•		-	+	+
Crayons, pencils, crucibles, etc.,		_	_	+	_
Drugs and medicines,		+	+	_	_
Dyestuffs,		-	_	_	_
Earthen, plaster, and stone ware,		_		_	_
Electrical apparatus and appliances, .		_	-	_	_
Electroplating,		_	+	+	_
Emery and sand paper and cloth, etc., .		+	+	+	+
Fancy articles, etc.,		_	_	_	_
Fertilizers,		+	_	+	+
Fine arts and taxidermy,		_	+	+	+
Fireworks and matches,		_	_	+	+
Flax, hemp, jute, and linen goods, .	•	+	-	_	+
Food preparations,		_	_	+	+
Furniture,		_	_	_	_
Glass,		-	-	_	_
Glue, isinglass, and starch,		+	+	+	+
Hair work (animal and human),		_	_	_	_
Hose: rubber, linen, etc.,		+	+	+	+
Hosiery and knit goods,		-	- 1	-	+
Ink, mucilage, and paste,	.	_	-		_
Ivory, bone, shell, and horn goods, etc.,	.	-	-	_	_
Leather,	.	-	- ·	_	_
Liquors and beverages (not spirituous),		_	_	-	_
Liquors: malt, distilled, and fermented,		-	-	+	+
Lumber,		-	- 1	-	_
Machines and machinery,	.	+]	+	+	+
Metals and metallic goods,		-	- 1	_	_
Mixed textiles,		+	- 1	- 1	_
Models, lasts, and patterns,		-	-	+	+
Musical instruments and materials,	.	-	-	- 1	_
Oils and illuminating fluids,	.	-	+	+	+
Paints, colors, and crude chemicals,	. [-	- 1	-	_
Paper and paper goods,	•	-	-	-	-
Perfumes, toilet articles, etc.,		- 1	- [-	-
Photographs and photographic materials,	.	- 1	+	+	+
Polishes and dressing,	.	+	+	-	=
Printing, publishing, and bookbinding,	•	-	-	+	-
Print works, dye works, and bleacheries,	•	+	- 1	-	_
Railroad construction and equipment, .	•	+	+	+	+
Rubber and elastic goods,	\cdot	-	-	-	_
Saddlery and harness,	- [-	-	-	-
Scientific instruments and appliances, .	.	+	-	+	+
Shipbuilding,	.	-	-	+	+
	- 1		1	1	
Silk and silk goods,	٠,	+	- 1	+	+

		Increase (+), Decrease (-), or No Change (-), in 1896 as Compared with 1895 in -					
Industries.	-		Amount of Capital Invested	Value of Goods Made and Work Done	Total Amount Paid in Wages	Average Number of Persons Employed	
Stone,			_	+	+	_	
Straw and palm leaf goods,			_	+	+	-	
Tallow, candles, soap, and grease,			_		_		
Tobacco, snuff, and cigars,			+	_	-		
Toys and games (children's), .			_	+	+	+	
Trunks and valises,			+	_			
Whips, lashes, and stocks,			+	-	_	_	
Wooden goods,			_	_	_	_	
Woollen goods,			-	_		_	
Worsted goods,			-	_	_	_	
ALL INDUSTRIES,							

All Industries, in the aggregate, show a decreased amount of capital invested, decreased product value, a smaller amount disbursed in wages, and a smaller average number of persons employed. The same statement applies to the following industries, 30 in number:

Boots and Shoes.
Boxes (Paper and Wooden).
Carriages and Wagons.
Clocks, Watches, and Jewelry.
Clothing.
Cotton Goods.
Dyestuffs.
Earthen, Plaster, and Stone Ware.
Electrical Apparatus and Appliances.
Fancy Articles, etc.
Furniture.
Glass,
Hair Work (Animal and Human).
Ink, Mucilage, and Paste.
Ivory, Bone, Shell, and Horn Goods,

Leather.

Liquors and Beverages (Not Spirit-

Lumber.

Metals and Metallic Goods.

Musical Instruments and Materials. Paints, Colors, and Crude Chemicals.

Paper and Paper Goods.

Perfumes, Toilet Articles, etc.

Rubber and Elastic Goods.

Saddlery and Harness.

Silk and Silk Goods.

Tallow, Candles, Soap, and Grease.

Wooden Goods.

Woollen Goods.

Worsted Goods.

The following seven industries show an increased amount of capital invested, value of goods made and work done, amount paid in wages, and average number of persons employed:

Brick, Tiles, and Sewer Pipe. Corks, Bungs, and Taps. Emery and Sand Paper and Cloth, etc. Hose: Rubber, Linen, etc.
Machines and Machinery.
Railroad Construction and Equip-

ment.

Glue, Isinglass, and Starch.

An increased amount of capital invested, but a decrease in value of goods made, amount paid in wages, and average number of persons employed, is shown for the following nine industries:

Awnings, Sails, Tents, etc.
Burial Cases, Caskets, Coffins, etc.
Carpetings.
Chemical Preparations (Compounded).
Mixed Textiles.

Print Works, Dye Works, and Bleacheries.
Tobacco, Snuff, and Cigars.
Trunks and Valises.
Whips, Lashes, and Stocks.

The following six industries show a decrease in capital invested but an increase in each of the other items:

Artisans' Tools.
Cordage and Twine.
Fine Arts and Taxidermy.
Oils and Illuminating Fluids.

Photographs and Photographic Materials.

Toys and Games (Children's).

An increase in the amount of capital invested and in value of goods made and work done, together with a decrease in amount of wages paid and average number of persons employed is shown for Drugs and Medicines. The same facts obtain for Polishes and Dressing, with the exception that there is no change in the average number of persons employed. decreased capital and output, with an increased amount paid in wages, and a larger average number of persons employed, is shown for Cooking, Lighting, and Heating Apparatus; Cotton, Woollen, and other Textiles; Fireworks and Matches; Food Preparations; Liquors: Malt, Distilled, and Fermented; Models, Lasts, and Patterns; and Shipbuilding. capital, larger product, decreased amount paid in wages, and a larger average number of persons employed is shown for Agricultural Implements; while a decreased capital, with increased product value and amount paid in wages, but a smaller average number of persons employed is shown for Arms and Ammunition; Electroplating; Stone; and Straw and Palm Leaf Goods. Bicycles, Tricycles, etc. exhibits an increased amount of capital invested, a smaller value of output, a larger amount paid in wages, and a smaller average number of persons employed. Brooms, Brushes, and Mops exhibits a decrease in capital, value

of product, and average number of persons employed, with a larger amount paid in wages. The same facts are true of Cement, Kaolin, Lime, and Plaster; Crayons, Pencils, Crucibles, etc.; and Printing, Publishing, and Bookbinding. A decrease in each of the items, except average number of persons employed, which shows an increase, is found in Buttons and Dress Trimmings and Hosiery and Knit Goods. A decrease in the value of goods made and work done, together with an increase in each of the other items, is shown for Fertilizers; Scientific Instruments and Appliances; and Sporting and Athletic Goods. Flax, Hemp, Jute, and Linen Goods exhibits an increase in capital and in average number of persons employed, but a decrease in value of output and amount paid in wages.

The following table reproduces the leading facts relative to All Industries from the presentation on pages 145 to 147:

Classification.	1895	1896	Increase (+), or Decrease (-), in 1896		
			Amounts	Percent- ages	
Number of private firms,	3,529	3,493	-36	-1.02	
Number of corporations,	1,036	1,070	+34	+3.28	
Number of partners,	5,577	5,482	—95	-1.70	
Number of stockholders,	44,928	46,143	+1,215	+2.70	
Amount of capital invested,	\$390,932,763	\$373,582,161	-\$17,350,602	-4.44	
Value of stock used,	\$318,753,542	\$302,272,325	-\$16,481,217	-5.17	
Value of goods made and work done, .	\$569,097,021	\$537,720,294	-\$31,376,727	-5.51	
Persons employed,					
Average number,	307,590	298,546	9,044	-2.94	
Smallest number,	258,776	235,110	-23,666	-9.15	
Greatest number,	351,915	353,440	+1,525	+0.43	
Excess of greatest over smallest					
number,	93,139	118,330	+25,191	+27.05	
Total amount paid in wages,	\$130,845,551	\$126,913,372	-\$3,932,179	-3.01	
Average yearly earnings,	\$425.39	\$425.16	-\$0.23	-0.05	
Average proportion of business done, .	62.56	58.98	-3.58	-5.72	
Average number of days in operation, .	291.56	279.43	-12.13	-4.16	

The changes in each of the elements summarized in the foregoing table, when reduced to the basis of percentages, are at once apparent. These changes, of course, indicate that the condition of the industries, in the aggregate, was much poorer in 1896 than in the previous year. The increase in the num-

ber of corporations and stockholders, it should be borne in mind, is due to changes from a private firm to a corporate basis on the part of establishments making return in each year. The same cause accounts for the percentages of decrease in the number of private firms and in the number of partners.

These returns are rendered by identical establishments in each year, and in the 4,609 considered in this comparison, capital decreased to the extent of 4.44 per cent, value of stock used decreased 5.17 per cent, and the value of goods made and work done decreased 5.51 per cent.

The aggregate average number of persons employed exhibits a decrease of 2.94 per cent, and the total amount paid in wages

		Ini	OUST	ues.			Number of Estab- lishments Con- sidered	Amount of Capital Invested	Average Number of Persons Employed
1	Boots and shoes,						605	\$19,990,145	42,263
2	Carpetings, .						12	6,020,485	4,232
8	Cotton goods,						169	112,902,817	78,058
4	Leather, .						143	7,329,970	6,347
5	Machines and ma	chi	nery	, .			371	23,733,634	18,082
6	Metals and metal	lic ;	good	в,			382	17,633,004	14,242
7	Paper and paper	god	ds,				123	23,670,894	11,112
8	Woollen goods,						122	19,186,201	13,671
9	Worsted goods,						27	15,343,809	11,318

[Note. It is proper to explain certain designations used in the above table. By "Industry value created above the value of stock and materials consumed. The values presented in this from the total value of goods made and work done in each of the specified industries, the value division of the proceeds of each industry, one part of this industry product is paid to the labor fund from which are paid freights, insurance, interest on loans (credit capital), interest on stock those for stock and wages. The remainder, if any, is the profit of the employer. The entire comes a "Profit and Minor Expense Fund," and is thus designated in the table. Of course, it we have enumerated, paid out of this balance, are in themselves considerable in amount, and for materials (stock), and wages.

The note presented with this table explains certain designations used in it. The largest industry product, per \$1,000 of capital invested, is found in Boots and Shoes, \$1,703.92. No other industry approaches this figure. The nearest to it, however, is Leather, the industry product being \$806.79. Following this industry, ranks Machines and Machinery and Metals and Metallic Goods, in which the industry products are \$764.27 and \$728.52, respectively. Next come Woollen Goods and

shows a decline of 3.01 per cent. The range of unemployment was wider in 1896 than in 1895. A decrease is also shown in average yearly earnings, while the average proportion of business done, based upon the full productive capacity of the establishments, was 5.72 per cent less in 1896 than in 1895. Each of the employés worked 12.13 days less in 1896 than in 1895.

The next table presents the actual product per \$1,000 of capital invested in each of the nine leading industries, with the average product per employé, the percentages of industry product paid in wages, and the percentages devoted to other expenses:

Total			Industry	PRODUCT	PERCENT INDUSTRY		
Amount d in Wages ouring the Year	Industry Product	Profit and Minor Expense Fund	Per \$1,000 of Capital	Average per Employé	Devoted to Profit and Minor Expenses	Paid in Wages	
20,834,331	\$34,061,691	\$13,227,360	\$1,703.92	\$805.95	38.83	61.17	1
1,443,472	2,371,772	928,300	393.95	560.44	39.14	60.86	2
25,865,194	36,848,019	10,982,825	326.37	472.06	29.81	70.19	8
2,984,515	5,913,775	2,929,260	806.79	931.74	49.53	50.47	4
9,731,509	18,138,982	8,407,473	764.27	1,003.15	46.35	53.65	5
7,218,118	12,845,987	5,627,869	728.52	901.98	43.81	56.19	6
4,476,285	9,419,292	4,943,007	397.93	847.67	52.48	47.52	7
4,963,615	8,269,142	3,305,527	430.99	604.87	39.97	60.03	8
3,848,327	6,965,696	3,117,369	453.97	615.45	44.75	55.25	9

Product" is meant the actual result of the productive forces in the industry, that is, the added and the following tables under the designation "Industry Product" are obtained by deducting of stock used, the difference being added value or actual product due to the industry. In the force in the form of wages, this being labor's share of the product. The balance constitutes a (fixed or invested capital), rents, commissions, salaries, etc.; in fact, all expenses other than balance of the industry product remaining after the deduction of the amount paid in wages, bewill be understood that the term "Minor Expense" is relative. The expenses, some of which are only to be classed as "Minor" in comparison with the generally larger amounts expended

Worsted Goods, the industry products per \$1,000 of capital being \$430.99 and \$453.97, respectively. Paper and Paper Goods follows, with an industry product per \$1,000 of capital of \$397.93, and is in turn followed by Carpetings, with an industry product of \$393.95. Cotton Goods ranks lowest among the industries in the selected list, the industry product per \$1,000 of capital being \$326.37.

These figures afford an indication of the efficiency of the

capital invested in these industries during 1896, and those which present the average industry product per employé may be considered as indicating the efficiency of labor. With respect to this point, Machines and Machinery leads the other industries, the average product per employé being \$1,003.15. Not far below it is Leather, in which an average of \$931.74 appears, and Metals and Metallic Goods, in which an average of \$901.98 is shown. Following in the order named, with averages as specified, are Paper and Paper Goods, \$847.67; Boots and Shoes, \$805.95; Worsted Goods, \$615.45; Woollen Goods. \$604.87; Carpetings, \$560.44; and Cotton Goods. \$472.06.

When the percentage of industry product paid in wages is considered, we find that Cotton Goods leads, the percentage being 70.19. Next rank Boots and Shoes, Carpetings, and Woollen Goods, the percentages being 61.17, 60.86, and 60.03, respectively. Metals and Metallic Goods follows, with a percentage of 56.19, and is in turn followed by Worsted Goods with a percentage of 55.25; Machines and Machinery. 53.65; and Leather, 50.47. In Paper and Paper Goods. ranking lowest in this comparison, the percentage is 47.52. These percentages of industry product paid in wages are the complements of the percentages of industry product devoted to profit and minor expenses, these two items aggregating 100 per cent or the whole of the industry product.

In the following presentation, the rank of the different industries for 1896, as regards the amount of industry product per \$1,000 of capital, is compared with the rank of the same industries for 1895, as derived from the report on Annual Statistics of Manufactures for that year:

1895.

Boots and Shoes. Leather. Metals and Metallic Goods. Machines and Machinery. Carpetings. Worsted Goods. Woollen Goods. Paper and Paper Goods. Cotton Goods.

1896.

Boots and Shoes. Leather. Machines and Machinery. Metals and Metallic Goods. Worsted Goods. Woollen Goods. Paper and Paper Goods. Carpetings. Cotton Goods.

In the above comparison, Boots and Shoes, Leather, and Cotton Goods retain the same position in each year. The places occupied by Machines and Machinery and Metals and Metallic Goods are reversed. Worsted Goods, which ranked sixth in 1895, ranks fifth in 1896; Woollen Goods, which ranked seventh in 1895, ranks sixth in 1896. Paper and Paper Goods, which ranked eighth in 1895, ranks seventh in 1896; and Carpetings, which ranked fifth in 1895, fell to eighth position in 1896.

With respect to the average industry product per employé, the rank of the industries in each of the years appears in the following table:

1895.

Machines and Machinery.
Leather.
Metals and Metallic Goods.
Paper and Paper Goods.
Boots and Shoes.
Woollen Goods.
Carpetings.
Worsted Goods.
Cotton Goods.

1896.

Machines and Machinery.
Leather.
Metals and Metallic Goods.
Paper and Paper Goods.
Boots and Shoes.
Worsted Goods.
Woollen Goods.
Carpetings.
Cotton Goods.

From the above table it is seen that six of the industries retain the same position in 1896 as in 1895; they are Machines and Machinery, Leather, Metals and Metallic Goods, Paper and Paper Goods, Boots and Shoes, and Cotton Goods. Worsted Goods, Woollen Goods, and Carpetings each changed positions in 1896.

The next comparison relates to the percentage of industry product paid in wages, the industries ranking as follows:

1895.

Cotton Goods.
Boots and Shoes.
Worsted Goods.
Carpetings.
Woollen Goods.
Metals and Metallic Goods.
Machines and Machinery.
Leather.
Paper and Paper Goods.

1896.

Cotton Goods.
Boots and Shoes.
Carpetings.
Woollen Goods.
Metals and Metallic Goods.
Worsted Goods.
Machines and Machinery.
Leather.
Paper and Paper Goods.

In this comparison, Cotton Goods, Boots and Shoes, Machines and Machinery, Leather, and Paper and Paper Goods retain the rank in 1896 which was held in 1895. Carpetings, which ranked fourth in 1895, ranks third in 1896; Woollen Goods, ranking fifth in 1895, ranks fourth in 1896; Metals and Metallic Goods rose from the sixth place in 1895 to fifth position in 1896; while Worsted Goods fell from third place in 1895 to sixth place in 1896.

In this connection, we present a series of separate tables for the nine leading industries for the purpose of comparison between the years 1895 and 1896, bringing forward for that purpose data contained in the table on pages 182 and 183. The first relates to Boots and Shoes.

Boots and Shoes. [Comparisons for 605 Establishments.]

CLASSIFICATION.	1895	1896
Amount of capital invested,	\$23,172,349	\$ 19,990,145
Value of goods made and work done (gross product),	\$89,938,212	\$87,945,168
Value of stock used and other materials consumed in production, .	\$55,559,505	\$53,883,477
Industry product (gross product less value of stock and materials),	\$34,378,707	\$34,061,691
Wages (labor's direct share of product),	\$20,838,632	\$20,834,331
Profit and minor expense fund (industry product less wages), .	\$13,540,075	\$13,227,360
Percentage of industry product paid in wages,	60.61	61.17
Percentage of industry product devoted to profit and minor expenses,	39.39	38.88
Percentage of profit and minor expense fund of capital invested, .	58.44	66.17

The percentages of industry product paid in wages in 1895 and 1896 were 60.61 and 61.17, respectively, a slight increase in the last named year. The percentage of industry product devoted to profit and minor expenses shows a decrease, being 39.39 in 1895 and 38.83 in 1896. The percentage which this profit and minor expense fund forms of capital invested was 66.17 in 1896 as against 58.44 in 1895; that is to say, a larger portion of the amount remaining in this industry, after eliminating the cost of stock, was devoted to wages in 1896 than in 1895, leaving a slightly smaller amount for the payment of expenses (other than wages and stock) and for profit, and this amount formed a larger percentage of the total capital in the industry in 1896 than in 1895.

A similar comparison for Carpetings follows:

Carpetings. [Comparisons for 12 Establishments.]

Classification.	1895	1896
Amount of capital invested,	\$ 6,008 ,49 7	\$6,020,486
Value of goods made and work done (gross product),	\$7,213,798	\$5,674,637
Value of stock used and other materials consumed in production, .	\$4,336,556	\$3,302,865
Industry product (gross product less value of stock and materials),	\$2,877,242	\$2,371,772
Wages (labor's direct share of product),	\$1,709,689	\$1,443,472
Profit and minor expense fund (industry product less wages), .	\$1,167,558	\$928,300
Percentage of industry product paid in wages,	59.42	60.86
Percentage of industry product devoted to profit and minor expenses,	40.58	39.14
Percentage of profit and minor expense fund of capital invested, .	19.43	15.42

The percentage of industry product paid in wages in this industry in 1895 and 1896 was 59.42 and 60.86, respectively, an increase in the last named year. Eliminating wages, the fund devoted to profit and minor expenses declined from 40.58 per cent in 1895 to 39.14 per cent in 1896, and this fund formed but 15.42 per cent of capital invested in 1896 as against 19.43 per cent in 1895.

The next table presents a comparison for Cotton Goods.

Cotton Goods. [Comparisons for 169 Establishments.]

CLASSIFICATION.	1895	1896
Amount of capital invested,	\$ 116,141,614	\$112,902,81
Value of goods made and work done (gross product),	\$89,615,751	\$87,146,00
Value of stock used and other materials consumed in production, .	\$46,244,435	\$50,297,98
Industry product (gross product less value of stock and materials),	\$43,371,316	\$36,848,01
Wages (labor's direct share of product),	\$26,234,125	\$25,865,19
Profit and minor expense fund (industry product less wages),	\$17,137,191	\$10,982,82
Percentage of industry product paid in wages,	60.49	70.19
Percentage of industry product devoted to profit and minor expenses,	39.51	29.8
Percentage of profit and minor expense fund of capital invested, .	14.76	9.7

In this industry, the percentage of industry product paid in wages increased in 1896 as compared with 1895, the percentages being 70.19 and 60.49, respectively. Of course, the percentage of industry product devoted to profit and minor expenses correspondingly decreased to 29.81 in 1896 as against 39.51 in 1895. The profit and minor expense fund formed 9.73 per cent of capital in 1896 as against 14.76 per cent in 1895.

The next table relates to Leather.

Leather. [Comparisons for 143 Establishments.]

CLASSIFICATION.	1895	1896
Amount of capital invested,	\$ 8,479,094	\$ 7,329,970
Value of goods made and work done (gross product),	\$22,379,841	\$19,041,544
Value of stock used and other materials consumed in production, .	\$15,746,203	\$13,127,769
Industry product (gross product less value of stock and materials).	\$6,633,638	\$5,913,775
Wages (labor's direct share of product),	\$3,448,203	\$2,984,515
Profit and minor expense fund (industry product less wages),	\$3,185,435	\$2,929,260
Percentage of industry product paid in wages	51.98	50.47
Percentage of industry product devoted to profit and minor expenses,	48.02	49.53
Percentage of profit and minor expense fund of capital invested, .	87.57	39.96

In this industry, we find practically the same conditions in each year, the percentages of industry product paid in wages being 50.47 in 1896 as against 51.98 in 1895. The percentage of industry product devoted to profit and minor expenses shows a slight increase, rising from 48.02 in 1895 to 49.53 in 1896. The percentage which the profit and minor expense fund formed of capital invested was 37.57 in 1895 and 39.96 in 1896.

The next table presents a comparison for Machines and Machinery.

Machines and Machinery. [Comparisons for 371 Establishments.]

Classification.	1895	1896
Amount of capital invested,	\$ 23,167,426	\$2 5,733,634
Value of goods made and work done (gross product),	\$26,027,029	\$28,489,920
Value of stock used and other materials consumed in production, .	\$9,931,227	\$10,350,93 8
Industry product (gross product less value of stock and materials),	\$16,095,802	\$18,138,98
Wages (labor's direct share of product),	\$9,072,876	\$9,731,500
Profit and minor expense fund (industry product less wages),	\$7,022,926	\$8,407,47
Percentage of industry product paid in wages,	56.37	53.6
Percentage of industry product devoted to profit and minor expenses,	43.63	46.8
Percentage of profit and minor expense fund of capital invested,	30.31	35.4

The percentage of industry product paid in wages in this industry fell from 56.37 in 1895 to 53.65 in 1896. A corresponding increase is found in the percentage of industry product devoted to profit and minor expenses rising from 43.63 in 1895 to 46.35 in 1896. The percentage of profit and minor expense fund of capital invested also rose, the increase being from 30.31 in 1895 to 35.42 in 1896.

A comparison for Metals and Metallic Goods follows:

Metals and Metallic Goods. [Comparisons for 382 Establishments.]

CLASSIFICATION.	1895	1896	
Amount of capital invested,	\$19,177,940	\$17,638,004	
Value of goods made and work done (gross product),	\$24,484,118	\$23,472,816	
Value of stock used and other materials consumed in production, .	\$11,021,656	\$10,626,329	
Industry product (gross product less value of stock and materials),	\$13,462,462	\$12,845,987	
Wages (labor's direct share of product),	\$7,479,648	\$7,218,118	
Profit and minor expense fund (industry product less wages),	\$5,982,819	\$5,627,869	
Percentage of industry product paid in wages,	55.56	56.19	
Percentage of industry product devoted to profit and minor expenses,	41.44	43.81	
Percentage of profit and minor expense fund of capital invested, .	31.20	31.92	

In this industry, the percentage of industry product devoted to profit and minor expenses declined from 44.44 in 1895 to 43.81 in 1896. The percentage of industry product paid in wages rose correspondingly from 55.56 in 1895 to 56.19 in 1896. The percentage of profit and minor expense fund of capital invested rose from 31.20 in 1895 to 31.92 in 1896.

The facts for Paper and Paper Goods are shown in the next table.

Paper and Paper Goods. [Comparisons for 123 Establishments.]

Classification.	1895	1896
Amount of capital invested,	\$24 ,682,633	\$23,670,894
Value of goods made and work done (gross product),	\$25,028,375	\$23,044,582
Value of stock used and other materials consumed in production, .	\$14,830,407	\$13,625,290
Industry product (gross product less value of stock and materials),	\$10,197,968	\$9,419,292
Wages (labor's direct share of product),	\$4,723,678	\$4,476,28
Profit and minor expense fund (industry product less wages),	\$5,474,290	\$4,943,00
Percentage of industry product paid in wages,	46.32	47.52
Percentage of industry product devoted to profit and minor expenses,	58.68	52.48
Percentage of profit and minor expense fund of capital invested.	22.18	20.8

In this industry, the percentage of industry product paid in wages rose from 46.32 in 1895 to 47.52 in 1896, while the percentage of industry product devoted to profit and minor expenses fell correspondingly from 53.68 in 1895 to 52.48 in 1896. The percentage of profit and minor expense fund of capital invested also declined from 22.18 in 1895 to 20.88 in 1896.

The next table relates to Woollen Goods.

www.libtool.com.cn

Woollen Goods. [Comparisons for 122 Establishments.]

CLASSIFICATION.	1895	1896
Amount of capital invested,	\$21,932,897	\$1 9,186,201
Value of goods made and work done (gross product),	\$24,899,606	\$19,662,182
Value of stock used and other materials consumed in production, .	\$14,410,166	\$11,393,040
Industry product (gross product less value of stock and materials),	\$10,489,440	\$8,269,142
Wages (labor's direct share of product),	\$5,987,401	\$4,963,618
Profit and minor expense fund (industry product less wages),	\$4,502,039	\$3,305,527
Percentage of industry product paid in wages,	57.08	60.08
Percentage of industry product devoted to profit and minor expenses,	42.92	39.97
Percentage of profit and minor expense fund of capital invested,	20.53	17.25

In this industry, we note an increase in the percentage of industry product paid in wages, which rose from 57.08 in 1895 to 60.03 in 1896, matched by a corresponding decrease in the percentage of industry product devoted to profit and minor expenses, which declined from 42.92 in 1895 to 39.97 in 1896. The percentage of profit and minor expense fund of capital invested also shows a decrease, falling from 20.53 in 1895 to 17.23 in 1896.

The final table relates to Worsted Goods.

Worsted Goods. [Comparisons for 27 Establishments.]

CLASSIFICATION.	1895	1896	
Amount of capital invested,	\$15,700,666	\$ 15,343,80	
Value of goods made and work done (gross product),	\$20,599,046	\$17,827,24	
Value of stock used and other materials consumed in production, .	\$13,133,003	\$10,861,556	
Industry product (gross product less value of stock and materials),	\$7,466,043	\$6,965,690	
Wages (labor's direct share of product),	\$4,490,457	\$3,848,32	
Profit and minor expense fund (industry product less wages),	\$2,975,586	\$3,117,36	
Percentage of industry product paid in wages,	60.15	55.2	
Percentage of industry product devoted to profit and minor expenses,	39.85	44.7	
Percentage of profit and minor expense fund of capital invested,	18.95	20.3	

In this industry, a decrease in the percentage of industry product paid in wages is found; this percentage was 60.15 in 1895 and 55.25 in 1896. The percentage of industry product devoted to profit and minor expenses increased from 39.85 in 1895 to 44.75 in 1896, and the percentage of profit and minor expense fund of capital invested also rose from 18.95 in 1895 to 20.32 in 1896.

www.libtool.com.cn
The returns permit of the following condensed general statements as regards the years 1895 and 1896 for the 4.609 establishments:

CAPITAL INVESTED.

The decrease in capital devoted to production in 1896 as compared with 1895, in All Industries, amounted to 4.44 per cent. In connection with this statement, it should be remembered that this does not necessarily imply the withdrawal of capital from the productive enterprises of the Commonwealth: and when taken in conjunction with the other facts relative to the condition of the industries during the year, it is apparent that while a statistical decrease is shown, this decrease may be due to the small amount of stock on hand and in process of manufacture, or to some of the items classed as capital, other than cash, as explained in the statement on page 157. In the nine leading industries, representing 65.80 per cent of the total capital as returned in 1896, the following facts appear: In 1896, an increase of capital is shown in two of these industries, namely, Carpetings, 0.20, and Machines and Machinery, 2.44 per cent. In each of the other leading industries, seven in number, the capital devoted to production exhibits a decrease in 1896 as compared with 1895, the percentages being as follows: Boots and Shoes, 13.73; Cotton Goods, 2.79: Leather, 13.55: Metals and Metallic Goods, 8.06: Paper and Paper Goods, 4.10: Woollen Goods, 12.52; and Worsted Goods, 2.27.

STOCK USED.

In All Industries, considered in the aggregate, the value of stock used in 1896 shows a decrease as compared with 1895 of 5.17 per cent. In the nine leading industries, the value of stock used in which amounted to 58.71 per cent of the aggregate value of stock used, as returned in 1896, the following percentages of decrease appear: Boots and Shoes, 3.02; Carpetings, 23.84; Leather, 16.63; Metals and Metallic Goods, 3.59; Paper and Paper Goods, 8.13; Woollen Goods, 20.94; and Worsted Goods, 17.30. Two of the industries, namely, Cotton Goods and Machines and Machinery, show an increase in the value of stock used in 1896 as compared with 1895, the percentages being 8.77 and 4.23, respectively.

GOODS MADE.

The aggregate value of goods made and work done in All Industries, in 1896 as compared with 1895, shows a decrease in value of 5.51 per cent. Only one of the nine leading industries, Machines and Machinery, exhibits an increase in product value, the percentage of increase being 9.46. In the other leading industries, the following percentages of decrease appear: Boots and Shoes, 2.22; Carpetings, 21.34; Cotton Goods, 2.76; Leather, 14.92; Metals and Metallic Goods, 4.13; Paper and Paper Goods, 7.93; Woollen Goods, 21.03; and Worsted Goods, 13.46. The aggregate value of the goods made and work done in these nine leading industries represented 58.08 per cent of the total value of goods made and work done, as returned by the 4,609 establishments in 1896.

PERSONS EMPLOYED.

The decrease in the average number of persons employed in 1896 as compared with 1895 was 9,044, or 2.94 per cent. decrease is also shown in the smallest number of persons employed of 23,666 persons, or 9.15 per cent; while the number of persons employed at periods of employment of the greatest number shows an increase of 1,525 persons, or 0.43 per cent. The range of unemployment was wider in 1896 than in 1895. In only one of the nine leading industries, Machines and Machinery, an increase in the average number of persons employed appears, the percentage of increase being 6.79. In each of the other industries, the following percentages of decrease in the average number of persons employed are found: Boots and Shoes, 2.12; Carpetings, 8.32; Cotton Goods, 2.18; Leather, 11.45; Metals and Metallic Goods, 3.08; Paper and Paper Goods, 4.59; Woollen Goods, 15.29; and Worsted Goods. 7.96.

WAGES PAID.

The total amount paid in wages in the 4,609 establishments represented in the 77 industries decreased 3.01 per cent in 1896 as compared with 1895. In eight of the nine principal industries, the following percentages of decrease appear: Boots and Shoes, 0.02; Carpetings, 15.57; Cotton Goods, 1.41; Leather, 13.45; Metals and Metallic Goods, 3.50; Paper and Paper

Goods, 5.24; Woollen Goods, 17.10; and Worsted Goods, 14.30. An increase is shown for Machines and Machinery of 7.26 per cent.

The average yearly earnings per individual, without regard to sex or age, employed in the 77 industries, was \$425.39 in 1895 and \$425.16 in 1896, a decrease of 0.05 per cent. The range from highest to lowest average yearly earnings was from \$712.32 to \$300.83 in 1895 and from \$706.42 to \$282.25 in 1896. The higher earnings rule in the industries demanding greater skill and employing males chiefly, and the lower in factory industries employing a large proportion of females and young persons.

Proportion of Business Done.

The average proportion of business done reached 62.56 per cent in 1895 and 58.98 per cent in 1896 of the full productive capacity of the 4,609 establishments, a decrease of 5.72 per cent in the latter year.

Each of the employes worked, on an average, 291.56 days in 1895 and 279.43 days in 1896, a decrease of 12.13 days, or 4.16 per cent.

INDUSTRIAL CHRONOLOGY.

1896.

[195]

INDUSTRIAL CHRONOLOGY — 1896.

Abington. In February, W. E. Lyon, shoes, resumed operations after shutdown of several months. — Joseph E. Kimball, inventor of various machines used in shoe manufacture, died, aged 57 years. March. Co-operative company formed to manufacture shoes. April. Webster S. Wales, retired shoe manufacturer, died, aged 77 years. May. Patent granted Herbert H. Buffum on slug or nall strip. July. Nash & Gifford established manufacture of shoes. September. L. A. Crossett, shoes, reduced force; in October, increased. October. Patent granted Wm. B. Arnold on removable form for boots or shoes. November. Patent granted Herbert H. Buffum on sewing machine.

Adams. In January, Greylock Shirt Co. resumed operations after two weeks' shutdown. - Berkshire Cotton Manufacturing Co. petitioned Legislature to increase capital stock to \$2,000,000. - L. L. Brown Paper Co. made changes and repairs. Berkshire Cotton Manufacturing Co. decided to erect office building. March. Vacant Zylonite Works purchased by Mannesmann Cycle Tube Co.; work of repairing and improvement begun in April. - Berkshire Cotton Manufacturing Co. began erection of steam plant consisting of seven 175 horse power boilers and smoke-stack 125 feet high; awarded contract for new storehouse and office building. April. Berkshire Cotton Manufacturing Co. set up new looms. - Adams Bros. Manufacturing Co., cottons, shut down one-half of plant. May. Mill No. 3 of Berkshire Cotton Manufacturing Co. dedicated; mill requires 1,000 operatives. --- Work of excavating for canal, 33 feet wide and 4.200 feet long, at plant of Mannesmann Cycle Tube Co. begun. — L. L. Brown Paper Co. decided to purchase engine of 3,000 horse power. June. Temporary shutdown occurred at plant of Renfrew Manufacturing Co., cottons. - Berkshire Cotton Manufacturing Co. started up No. 3 mill; in July, increased plant by purchase of additional land. July. Renfrew Manufacturing Co., cottons, added new machinery and started up. -Greylock Shirt Co. resumed operations after shutdown. August. Berkshire Cotton Manufacturing Co. built new dam 130 feet long and increased height of chimney; temporary shutdown occurred each week on account of lack of orders. ---- Renfrew Manufacturing Co., cottons, shut down temporarily on account of dull trade. - L. L. Brown Paper Co. shut down to allow new engine to be placed; mill damaged by fire. ber. Berkshire Cotton Manufacturing Co. shut down for one week and resumed .-Weaving department of Renfrew Manufacturing Co., cottons, ran on short time; dyehouse shut down indefinitely; in October, resumed. October. Grevlock Shirt Co. in-November. Repairs made at plant of Phillips Woollen Co. creased force. Plans made by Renfrew Manufacturing Co., cottons, for erection of addition to dyehouse, 100 x 100 feet, one story.

Agawama. In January, Worthy Paper Co. resumed operations after three months' shutdown for repairs. — Agawam Co., woollens, shut down a few days for repairs.

Amesbury. In February, Currier-Cameron Co., wheels, and Briggs Carriage Co. damaged by flood. March. Miller Bros., carriages, ran overtime. — Following firms shut down temporarily because of flood: Merrimac Hat Co., Currier-Cameron Co., wheels, and carriage manufacturing firms of Biddle & Smart Co., Samuel Rowell & Sons, and Folger & Drummond. April. Hamilton Woollen Co. shut down for repairs in consequence of fire in picker room. May. Lewis, Gross, & Co., shoes, decided to remove plant to Milton, N. H. — Adams & Pettingill, shoes, suspended operations. — Seth H. Gage granted patent on carriage; assigned to Neal & Bolser. — Hamilton Woollen Co. resumed operations after three weeks' shutdown; in July, began to run alternate weeks. August. Plant of Adams & Pettingill, shoes, purchased by P. N. Wadleigh of Haverhill. — C. D. Pecker, shoes, shut down for repairs. — Repair shop of Boston & Maine R. R.

www.libtool.com.cn

ran on reduced time. September. Briggs Carriage Co. increased force.—Hamilton Woollen Co. resumed permanently after shutting down alternate weeks. November. Briggs Carriage Co. began enlargement of plant.—William G. Ellis, carriage and car manufacturer, died, aged 64 years. December. Carriage shipments during 1896 aggregated 10,390; in 1895, 11,395; decrease, 1,005, or 8.82 per cent.

Amherst. In February, A. R. Cushman, leather-board, shut down part of plant and reduced running time. — The Hills Co., straw goods, enlarged bleaching facilities and added boilers. April. Henry F. Hills of The Hills Co., straw goods, died, aged 62 years. June. A. R. Cushman, leather-board, shut down remaining portion of plant. — The Hills Co., straw goods, began erection of addition, 32 x 56 feet, three stories. August. Plant of Marcy & Gardner, bricks, damaged by fire; repaired in September. December. A. R. Cushman, leather-board, resumed operations.

Andover. In February, Ballardvale Manufacturing Co., bronze goods, started up on reduced time.

July. Smith & Dove Manufacturing Co., linen thread, shut down alternate weeks. — Partial shutdown occurred at factory of Tyer Rubber Co. August. Smith & Dove Manufacturing Co., linen thread, erected new dry house and new machine shop for repairs. — Tyer Rubber Co. ran on reduced time. September. Marland Mills, woollens, started up in part. — Ballardvale Mills, woollens, changed owners. October. Smith & Dove Manufacturing Co., linen thread, resumed full time. December. Stock subscribed for establishment of new industry: the manufacture of patented rubber shoes.

Ashburnham. In January, W. F. Whitney, furniture, resumed operations after shutdown. August. O. Whitney & Co., chairs, shut down indefinitely. September. Factory occupied by Brooks Basket Co. destroyed by fire. November. Ashburnham Cotton Mills started up on reduced time after shutdown.

Ashland. In February, Ashland Shoe and Leather Co. started up factory on reduced time. March. Warren Thread Co. contracted for general electric apparatus. —— Ashland Shoe and Leather Co. increased to full time; in June, shut down for stock taking.

Athel. In January, Daniel E. Adams, silks, added 60 horse power engine. — New looms placed in Eagle Woollen Mills. February. Miller River Manufacturing Co., woollens, added electric plant. March. Diamond Match Co. increased force. April. Hill & Greene, shoes, resumed operations after stock taking. May. Edwin Ellis & Son, doors, and A. F. Tyler, sashes and blinds, increased running time. — Hill & Greene, shoes, leased factory formerly occupied by Munroe, Elkins, & Smalledge in order to increase capacity. — Company organized to manufacture newly patented billiard table; capital stock \$750,000; furniture factory of J. W. Goodman leased. June. Charles M. Lee, shoe manufacturer, died, aged 69 years. July. Operations resumed at plano-case factory of Goddard & Manning. August. Edwin Ellis & Son, sashes, doors, etc., ran overtime. — L. S. Starrett, tools, shut down for stock taking and repairs. November. Patent granted to Willard Hager on display rack. December. Factory of Edwin Ellis & Son, sashes, doors, etc., destroyed by fire.

Attleborough. In January, Hebron Manufacturing Co., cottons, damaged by fire. February. Plans made for enlargement of plant of Howard-Bullough American Machine Co. - Old Mechanics Mills leased and renovated. March. Plans made for new cotton - Hebron Manufacturing Co., cottons, ordered new looms. May. Attleborough Steam & Electric Co. added machinery for supplying plant with water power. — Watson, Newell, & Co., jewelry, moved into new factory. - Horton, Angell, & Co., buttons, decided to erect new factory, 36 x 250 feet, two stories. June. Plant of W. F. Briggs Co., jewelry, sold to Frank Fonteneau & Co.; same business continued. — Mark O. Wheaton of Wheaton, Richards, & Co., jewelry, died. July. Mossberg Manufacturing Co., machinery, reorganized as Mossberg & Granville Manufacturing Co. - Ellis, Livsey, & Brown, jewelry, built addition to be used as office and packing room .new factory for Horton, Angell, & Co., buttons. — Hebron Manufacturing Co., cottons, shut down temporarily and resumed with new time schedule; in August, made repairs. August. Arrangements made for the manufacture of seamless wire in factory formerly occupied by Watson, Newell, & Co., jewelry. - Money subscribed for erection of factory for Mossberg & Granville Manufacturing Co.; in October, quarters secured in Providence, R. I., for removal of firm to that place. November. Patent granted Josiah F. Ryder on combination tool. --- Mossberg & Granville Manufacturing Co., machinery, removed to Providence, R. I.

No. 36.] INDUSTRIAL CHRONOLOGY — 1896.

www.libtool.com.cn

Auburn. In January, property of Crossley Manufacturing Co., woollens, sold at suction

Avon. In January, Avon Shoe Co. closed up business. February. L. G. Littlefield, shoes, started up on full time. May. Business revived at shoe factory of J. B. Lewis Co. August. William H. Tucker, retired shoe manufacturer, died, aged 74 years. November. L. G. Littlefield, shoes, resumed operations after shutdown.—Bartlett Collins. carriages. built addition to factory.

Barre. In February, John M. Noyes Shoe Co. of Lynn, accepted proposition to establish manufacture of shoes in this place; plans made for erection of factory building, 60 x 200 feet, two stories; work begun in March; completed in June and business removed from Lynn to this place; in July, started up. December. J. Edwin Smith, cottons, resumed on short time after two months' suspension.

Becket. In February, Becket Silk Co. made arrangements for organization of stock company. November. M. E. Ballou & Son, baskets, made improvements in water power.

Belchertown. In February, R. H. Long Shoe Co. of Braintree, leased building preparatory to moving business to this place; in March, removal effected and operations begun.

Bellingham. In January, Ray's Woollen Co. added looms. March. Taft, Murdock, & Co., woollens, shut down temporarily on account of flood. April. Ray's Woollen Co. shut down for repairs. May. Taft, Murdock, & Co., woollens, reduced running time to four days per week on account of over-production. June. No. 3 mill of Ray's Woollen Co. resumed operations.—Taft, Murdock, & Co., woollens, shut down indefinitely; 150 operatives affected. July. Ray's Woollen Co. shut down; in August, resumed with reduced force. August. Taft, Murdock, & Co., woollens, shut down for repairs; in September, resumed with reduced force. October. Ray's Woollen Co. shut down indefinitely; 200 operatives affected.

BEVERLY. In January, Burwell Shoe Co. changed name to Beverly Shoe Co .-George V. Brown, shoe patterns and tips, sold out. --- Nugent Bros., specialty in shoes, February. J. A. Wallis & Co., shoes, increased outmoved from Salem to this place. put. - Bray, Stanley, & Webber, shoes, removed to new quarters. March. Jenkins-Falligren Co. established to manufacture shoes. — E. B. Rogers & Co., shoes, succeeded Beverly Shoe Co. — Employés of Babb, Williams, & Douglas Co., shoes, struck because of reduction in wages; work resumed in April. April. Elmer Andrews, shoes, sold out. - French, Williams, & Rowe established to manufacture shoes. - R. E. Larcom, shoes, enlarged quarters. May. J. H. Sanborn and J. H. Hinckley & Co. established to manufacture shoes. — Eva J. Lunt granted patent on shoe string fastener. — P. A. Field & Co., shoes, increased force. — Beverly Machine Co. and William E. Bailey & Co., machinery, consolidated. - Building leased for the manufacture of woven hose and bicycle tires. --- Rhode Island Copper Paint Manufacturing Co. decided to locate in this June. Albert Warren Co., shoes, removed from Salem to this place. September. E. B. Rogers Co., shoes, succeeded by Bay State Shoe Co. November. P. A. Field & Co., shoes, removed to Salem. - Factory of Seth Norwood Shoe Co. destroyed by fire.

Billeriea. In July, Talbot Woollen Mills shut down for annual vacation; in August, resumed; damaged by fire. September. Talbot Dyewood and Chemical Co. suspended operations. October. Talbot Woollen Mills ran on reduced time on account of lack of orders; in November, resumed full time.

Blackstone. In January, Millville factory of Woonsocket Rubber Co. shut down indefinitely; 1,200 operatives affected. March. Temporary shutdown on account of high water occurred at plant of Lawrence Felting Co. May. Woonsocket Rubber Co. resumed operations at Millville factory. June. Blackstone Manufacturing Co., cottons, reduced running time to four days per week; in July, began shuting down every third week. July. Millville factory of Woonsocket Rubber Co. shut down for four weeks. — Caleb Seagraves, retired woollen manufacturer, died. August. Blackstone Manufacturing Co., cottons, shut down for one week. September. Millville factory of

Woonsocket Rubber Co. resumed operations. October. Lawrence Felting Co. increased force. November. Satinet mill formerly operated by A. M. Armstrong started up by Frederic Thayer of Woonsocket, R. I., after long idleness. December. Patent granted to Samuel J. Harris on car fender.

BOSTON. In January, Star Watch Co. organized under laws of New Jersey: capital stock \$100,000, --- A. D. Nagle & Co., leather, dissolved, --- Stiles & Winslow, leather, succeeded by Stiles & Winslow Leather Co.; incorporated; capital stock \$75,000,-Charles K. Crane & Co., shoes, and A. S. Young & Co., cotton clothing, dissolved .-Vogt & Shaw, relief work, succeeded by Paul Vogt. - Fowle, Cobb. & Pearson, shirts and overalls, succeeded by Fowle & Pearson. - James Mellen of Curtis, Davis, & Co., soap, and Charles F. Bellows of Bellows & Manson, wrought iron and steel, died. Establishment of Henry T. Edwards, electric and gas fixtures, damaged by fire. ary. American Drosophore Co., humidifying machines, increased capacity. -- Edward C. Judd granted patent on sole leveling machine. - Jas. E. Baker of J. W. Kennan Co., leather, died, aged 54 years, --- Business of following firms damaged by fire: Walter E. Horton, trunks; A. & J. E. Tuttle, patterns; Mills, Knight, & Co., printers and manufacturers of memorandum books; A. Cohen & Co. and Fowle & Pearson, clothing; and Albert Trostel & Sons, leather. March. Continental Lasting Machine Co. incorporated under laws of Maine: capital stock \$300,000, --- Twentieth Century Co. established to manufacture heels; incorporated under laws of Maine; capital stock \$250,000. --- Lasted Toe Cap Co. established to manufacture toe caps; incorporated under laws of Maine: capital stock \$600,000. --- William and Charles E. Gordon granted patent on adjustable last. - Sewell & Day Cordage Co. increased capacity. - John Reece, inventor and manufacturer of Reece button-hole machine, died, aged 42 years. - Building and stock of Pope Manufacturing Co., bicycles, destroyed by fire. - Plant of P. Derby & Co., furniture, damaged by fire. April. Sprague Shoe Co. established manufacture of shoes. - Zachary T. French granted patent on new style sewing machine to be used in shoe manufacture. — Consolidated Hand Method Lasting Machine Co. increased floor space and capacity. --- Reece Button-Hole Machine Co. moved into new factory. --S. Hill Electric Co. removed to New Bedford. - Walter B. Ellis withdrew from copartnership in Electric Stain Co.; business continued by remaining partner under same style. - James J. Walworth, president of Walworth Manufacturing Co., heating apparatus, died, aged 87 years. - Miles Standish Cahill, manufacturer of shoe findings, blackings, etc., died, aged 72 years. - Establishments of Miller & Whalen, printers, Samuel Hipkiss, leather goods, and Sewell & Day Cordage Co. damaged by fire.-Strike occurred among painters. May. Company organized to manufacture bicycles under name of Alpha Cycle Co.; capital stock \$80,000. - Edwin D. Mellen and Stillman F. Kelly formed partnership to continue the manufacture of soap under name of Curtis, Davis, & Co. — Patents granted as follows: Peter A. Coupal, on machine for indenting surfaces; assigned to Goodyear Shoe Machinery Co.; Ambrose S. Vose, on heel trimming and randing machine, rand guard, and knife; Lewis E. Ericson, on sole-rounding machine; Augustus Seaver, on upper and box toe for shoes; and John S. Stone, on telephone circuit and apparatus; assigned to American Bell Telephone Co. - J. R. Pearl & Co., shoes, dissolved; business continued by Beacon Shoe Manufacturing Co. - Thayer, Foss, & Co., leather, dissolved; H. S. Thayer and John P. Richardson continued under same style. — Business of following firms damaged by fire: Boston Leather Dressing Co.; Maine Belting Co., cotton belting; William Hall & Co., brass founders; Egyptian Chemical Co., embalming fluids; George B. Dodge & Co., printers; and Crowell Manufacturing Co., gummed labels. - Strikes occurred among stage employes and hoisting June. Ashland Leather Board Co. incorporated; capital stock and portable engineers. \$15,000. — Mann, Wright, & Co., cut soles, dissolved; business continued by O. A. Mann & Co. - Proctor, Hunt, & Co., leather, dissolved; business continued by new firm of Proctor, Ellison, & Co. — George Dennie, formerly of Dennie & Boardman, leather, died, aged 92 years. - Thomas J. Holmes, manufacturer of atomizing tubes, died, aged 51 - Factory of Oscar Gowing, shirts, damaged by fire. July. Thompson, Krehl, & Co., leather, dissolved .- New firm, Thompson, Packard, & Co., leather, organized. Goodyear Shoe Machinery Co. purchased land for erection of new factory building. August. John W. Regan granted patent on metal device to be used in putting out fires. It is to be used instead of the nozzle on hose and distributes water in a more effective manner. --- New York, New Haven, & Hartford R. R. began running trains on elevated tracks. - Goodyear Shoe Machinery Co. made plans for erection of two buildings of brick; one, 66 x 348 feet, four stories; the other, 32 x 70 feet. — Repair shops of Boston & Maine R. R. began shutting down on Saturday. - George P. Grant, president of Grant

Yarn Co., Fitchburg, died, aged 52 years. — Benjamin Shreve of Shreve, Crump, & Low, jewelry, died in Salem, aged 83 years. — Factory of Robert Bishop, cotton waste, dam-September. Contract awarded for erection of new factory building for American Tool & Machine Co.; of brick, 52 x 156 feet, five stories, - Sail makers struck to enforce shorter working day. October. George Ferguson granted patent on lasting machine and David F. Hartford on machine for cutting soles. - Hallet & Davis Piano Manufacturing Co. resumed full time. - Work begun on new building of American Tool & Machine Co. - Strikes occurred among tailors and steamfitters. November Patents granted as follows: To Albert F. Chace, on vehicle wheel; to James B. Forsythe, on safety stop device for grinders; to Albert L. Gladwin, on burner for liquid fuel: to John H. Graham, on car truck; to George C. Hicks, on heat insulator; to Percy C. Howe. on thermostat-actuated fire alarm; to William A. Byrne, on piano; to Mary A. Farrington, on garment supporter; to Thomas Fillebrown, on easel; to William H. Nicholas, on black leading machine; to Achilles de Khotinsky, on lightning arrester; to William J. Ross, on sprocket wheel; to Walter Shaw, on lasting machine; to William H. Golding, on printers' composing stick, rule, and lead cutter; to John S. Hassen, on mail marking machine; to George F. Milliken, on fire alarm signal box; to Arthur Newton, on nail package; to James T. Norton, on electric switch; to Andrew G. Paul and H. A. Joslin. on paper drier; and to John Reece (deceased), on sewing machine for finishing buttonhole pieces. - New shoe manufacturing firm, Rubber Soled Leather Shoe Co. incorporated; capital stock \$1,000,000. - Following firms damaged by fire: Turner & Kimball Cabinet Co.; A. Cohen, clothing; George Coleman, bookbinder; and White-Smith Music Publishing Co. December. Patents granted as follows: To Horace Weeks, on sole nail; to Everett D. Chadwick, on detachable fastening; to Stillman M. Fay, on brake mechanism for elevators; to William S. Richardson, on fastener for gloves; to Edwin N. Stephenson, on machine for stuffing mattresses, and to Andrew J. Robinson, on stopper attachment for bottles, power brake, car motor, and car truck. - Boston Carpet Slipper Co. moved into new quarters. - Henry L. Pierce, chocolate manufacturer, died, aged 73 years. - Factory of William R. Dimond & Co., stencils, and Bay State Electrotype Foundry, damaged by fire. - Strike occurred among employés of West End Street Railway Co.

[Brighton.] In July, West End Street Railway Co. made plans for erection of new car house, 149 x 153 feet. October. Factory of Sewell & Day Cordage Co. damaged by fire. [Charlestown.] In July, carriage factory of E. A. Gillett & Sons, damaged by fire.

[Dorchester.] In March, carriage factory of J. E. Fisher & Co. damaged by fire. May. West End Street Railway Co. erected new power house; in September, purchased land for erection of two car houses.

[East Boston.] In May, plant of Maverick Oil Co. destroyed by fire.

[Jamaica Plain.] In January, Franklin Brewing Co. opened new brewery; main building, 113 x 215 feet, seven stories. *June*. Boylston Brewery damaged by fire. *November*. Strike occurred at plant of Franklin Brewing Co.

[Mattapan.] In January, A. J. Wilkinson & Co., machinery, ran overtime; in July, began erection of addition.

[Neponset.] In June, Zebulon E. Coffin, inventor of valves and president of Coffin Valve Co., died, aged 80 years.

[Roslindale.] In June, John Pearce, formerly of J. R. Leeson & Co., shoe findings, died, aged 80 years.

[Roxbury.] In January, E. Howard Watch & Clock Co. suspended operations temporarily, owing to dull trade. March. Dennison Manufacturing Co., paper goods, purchased plant in Framingham for removal of business to that place. May. Sylvester H. Roper, inventor of steam bicycle, died, aged 72 years. July. Thomas G. Plant Co. of Lynn, began erection of new shoe factory; of brick, 52 x 388 feet, six stories. August. John Bray invented brake for electric car which causes full stop almost immediately.—Factory of Brooks Bank Note Co. damaged by fire. September. Roxbury Carpet Co. shut down one week for repairs. November. Shoe factory of Thomas G. Plant Co. completed and business started up.—Roxbury Carpet Co. shut down indefinitely; in December, resumed.

[South Boston.] In January, company organized to build ships; capital stock \$2,500,000; under laws of New Jersey. — U. S. Sugar Refining Co. of New Jersey, decided to erect refinery in this place. March. Plant of Suffolk Brewery Co. damaged by fire. April. Work begun on new factory buildings of F. E. Atteaux & Co., dyestuffs; of wood, 80×100 and 50×150 feet, one story; with engine and boiler house of brick, 25×35 feet, $2\frac{1}{3}$ stories. May. Bay State and Brookline Gas Companies combined; 500 employes discharged on

www.libtool.com.cn

account of union. August. Boston Wharf Co. made plans for erection of warehouse; of brick, 100×160 feet.

[West Roxbury.] In November, Waldberg Brewery damaged by fire.

Boylston. In September, Warren H. Baker, woollen manufacturer, died, aged 56 years.

Bradford. In January, improvements made at plant of Haverhill Paper Co. March. A. G. Harding assumed control of Bradford Iron Works.—Wood-working plant of L. C. Ring destroyed by fire. June. Gilman Bros., hats, erected brick addition to be used for boiler-room; in July, added new boilers. July. Arrangements made for permanent closing of Bradford Iron Foundry. September. Haverhill Paper Co. shut down indefinitely; work begun on new storehouse. October. Gilman Bros., hats, reduced wages. November. Haverhill Paper Co. resumed operations.—Strike occurred at factory of Gilman Bros., hats; settled. December. Haverhill Paper Co. decided to remove to Berlin. N. H.

Braintree. In February, R. H. Long Shoe Co. announced intention of removing business to Belchertown; in March, removal effected. April. Plant of Braintree Wood and Lumber Co. destroyed by fire. August. Employés in granite quarry struck. September. Braintree Shoe Manufacturing Co. discontinued business. November. Patent granted to Elijah C. Hall on heater and to William B. Merritt on device for closing tube punctures. — Automatic Electric Pump Co. of Boston, purchased land and began erection of factory, 30 x 130 feet, two stories.

Bridgewater. In January, Bridgewater Iron Co. damaged by flood. April. Strike occurred among lasters at shoe factory of W. H. McElwain & Co.; settled. May. Albion K. Washburn granted patent on sole leveling machine.—Treers at factory of W. H. McElwain & Co., shoes, struck for increase, settled; in October, lasters struck. October. Manufacture of eyelets established.

BROCKTON. In January, R. B. Grover & Co., shoes, ran on reduced time.-Lowell M. Reynolds, shoes, advertised factory for sale. - A. M. Niles Shoe Co. started up. - Brockton Box Toe Co. secured additional room, 40 x 100 feet, increased force and ran overtime. - G. S. Huff established manufacture of men's shoes, and Wakeling & Clifford, successors to C. F. Wakeling & Co., established manufacture of specialty in women's footwear, - John F. Murphy & Co. established manufacture of shoe findings. - Means & Co., shoes, dissolved; factory leased to M. P. Clough & Co. --- Hurley Bros. & Co., shoes, dissolved; succeeded by Hurley Shoe Co.; incorporated; capital stock \$6,000. — Factory of Brockton Last Co. damaged by fire. February. C. S. Willett invented gate for electric cars. - Ephraim S. Morton granted patent on last block fastener. - A. S. Meyers, formerly of Scott & Meyers, machinery, started up new machine - R. B. Grover & Co., shoes, resumed work after shutdown for stock taking. Brockton Power Co. organized; to erect plant to furnish power to manufacturing establishments. — Contract awarded by Bouvé, Crawford, & Co. for new factory: to be 35 x 300 feet, three stories. --- F. M. Shaw & Son, leather, purchased manufacturing business of J. A. Roarty. - Plans made for erection of factory, 30 x 60 feet, two stories, for manufacture of inks, stains, etc., by William Goodrich. --- Woodward & Wright, lasts, made addition to factory. --- Strike on account of price list occurred among lasters of J. M. O'Donnell & Co.; settled. March. C. H. Pope invented jack for re-lasting. - F. M. Shaw & Son, leather, transferred business of J. A. Roarty to their factory. --- C. B. Gould & Co., shoes, removed business to new quarters. ---- Strike because of wage differences occurred at Standard Rubber Works. - Strike of edge trimmers and setters at factory of A. M. Herrod & Co., shoes, caused shutdown; work resumed later. April. Foundation of new factory of Bouvé, Crawford, & Co. completed. - M. P. Clough & Co., shoes, moved into new quarters. --- R. B. Grover & Co., shoes, decided to make addition to factory. Work begun on new factory of T. A. Norris Machine Co., shoe machinery. --- Frank E. White Co., shoes, ran with two-thirds capacity. --- I. & R. Hughes, boiler makers, changed firm name to Hughes & Richards. --- Charles S. Pierce, tip manufacturer, added box toes to business. — Bittenbender & Caverly, shoes, dissolved. — W. L. Doty & Co., shoes, dissolved; business continued by W. L. Doty. -- Strikes among lasters occurred at shoe factories of E. & L. C. Keith and L. M. Reynolds & Co. May. American Heeling Ma-

chine Co. purchased land in Winchester for erection of new factory building, preparatory to removal of business. - John B. Hadaway granted patent on stitch separating and indenting machine. — W. L. Dunbar & Co., patterns, ran overtime. — Temporary shutdown for repairs at shoe factory of R. B. Grover & Co. on account of accident to holler. -Preston B. Keith, shoes, shut down for stock taking. - Goddard & Rogers, shoe machinery, dissolved; business continued by Mr. Rogers. - M. P. Clough & Co., shoes, granted employes half-holiday on Saturday. - Strike occurred among edge setters and trimmers at shoe factory of Bouvé, Crawford, & Co. June. Stock company formed to manufacture bicycle tires. -- New factory of T. A. Norris Machine Co., shoe machinery. completed, and occupied by firm. -- Company formed to manufacture preparation for preventing patent leather from cracking in process of manufacture, the invention of James H. Cunningham. - Emery & Packard, leather, and H. T. Perry & Co., shoe findings, secured larger quarters. - Accident to boiler caused temporary shutdown at shoe factory of R. B. Grover & Co. - Baxendale & Co., box toes and counters, added cutting machines. - Strike occurred at shoe factory of L. M. Reynolds; settled. July New factory of Bouvé, Crawford, & Co., shoes, completed and firm moved in .--- Changes and improvements made at shoe tree factory of O. A. Miller. - George A. Carter, tacks, moved into larger quarters. --- Walker, Taylor, & Co., shoes, resumed operations. --George G. Snow, shoes, started up. - Chas. A. Eaton & Co., shoes, started up with increased capacity after shutdown for repairs. --- Frank E. White Co., shoes, shut down for repairs. - Snell & Atherton, shoe tools, Lilly-Brackett Co., Thompson Bros., Packard & Field, and J. M. O'Donnell & Co., shoes, shut down temporarily. -- 8. Newell Buck, shoe manufacturer, died, aged 69 years. August. School established for teaching lasters to operate lasting machines. - Repairs made at factory formerly occupied by Bittenbender & Caverly. - B. B. Grover & Co., shoes, shut down during two weeks for stock taking and resumed. - Preston B. Keith, shoes, shut down for a few days. - A. M. Herrod & Co., shoes, shut down for stock taking and resumed. --- Brockton Street Railway Co. enlarged plant. --- Edge makers at shoe factory of McCarty, Sheehy, & Kendrick struck. - Plumbers employed by T. J. Kinney struck. September. Mawhinney Last Co. of Worcester, purchased factory for establishment of business in this place. - Dexter E. Wilbar & Son, shoes, began manufacture of shoes having inflated sole .-Douglas Shoe Co. increased force. - Erection of new factory begun for Trilby Polish Manufacturing Co. - Quarters secured and machinery set up for the manufacture of wire nails. --- Grafton Box Co. of Grafton, N. H., established branch factory in this place. — Chas. A. Eaton & Co., shoes, shut down for one week. — Factory of Ware & Lincoln, shoes, damaged by fire. - Strike at shoe factory of McCarty, Sheehy, & Kendrick settled. October. John W. Barlow granted patent on last. - W. L. Douglas Shoe Co. made changes in lasting machines. - L. C. Bliss & Co., shoes, decided to remove to Whitman. - Preston B. Keith, shoes, shut down for stock taking and increased force. — Box factory of Theodore Cushing damaged by fire. November. Preston B. Keith, shoes, succeeded by Preston B. Keith Shoe Co.; incorporated; capital stock \$100,000. — Improvements made at factory of Mawhinney Last Co. and erection of addition begun, 20 x 60 feet, one story, --- Patent granted to Daniel W. Stevenson on sewing machine. - D. W. Field, shoes, increased force. - L. M. Reynolds & Co., shoes, and Charles A. Eaton & Co., shoes, shut down for inventory and resumed. - F. M. Shaw & Son, leather, ran with reduced force. — Isaac A. Dunham, inventor of several tools used in shoe manufacturing, died. - Factory of A. M. Herrod & Co., shoes, damaged by December. Patent granted to John B. Hadaway on welt beveling attachment for sole sewing machines and to George O. Goddard on strip feeding attachment for printing presses. - W. S. Bamford, Arthur W. and Alfred A. Smith formed partnership and secured quarters for manufacture of elastic goring. --- George R. Earle established manufacture of shoe patterns. — Mulligan & Drislane and George H. Jennings established manufacture of box toes. - William Talbot established manufacture of shoes. -George E. Keith, shoes, changed style to George E. Keith Co.; incorporated; capital stock \$250,000. — Ware & Lincoln, shoes, succeeded by Ware, Lincoln, & Thayer. Edward O'Donnell retired from firm of J. M. O'Donnell & Co.; business continued under style of J. M. O'Donnell & Co. and removed to Middleborough. --- Mawhinney Last Co. removed from Worcester to this place. - Brockton Box Toe Co. moved into new and larger quarters. — Chas. A. Eaton & Co., shoes, increased power and space. — Small, Nesmith, & Co., shoes, increased space. - A. M. Herrod & Co., shoes, shut down a few days. — Edward Tisdale of C. E. Tisdale & Co., shoes, West Bridgewater, died, aged 74 years. - Number of cases of shoes shipped during 1895 and 1896, as compiled by the Brockton Enterprise, were as follows: -

204 STATISTICS OF MANUFACTURES. [Pub. Doc.

Months.		1895	1896	Months.			1895	1896
January, .		35,238	33,465	August, .			43,056	83,100
February, .		37,006	36,110	September,			35,073	40,029
March, .		48,416	40,556	October, .			30,915	43,787
April,		42,734	42,150	November,			35,805	28,850
Мау,		49,709	51,242	December,			20,527	22,950
June,		37,370	31,681	Totals,			444,763	434,375
July,	.	28,914	30,455			į		

It will be seen by the above table that the shipments for 1896 were 434,375 cases as against 444,763 cases in 1895, a decrease of 10,388 cases or 2.34 per cent. Shipments during past ten years were as follows:—

	YE	ARS.		Cases YEARS.						Cases	
1887, .			•	383,404	1892,						428,241
1888, .				422,282	1893,						422,053
1889, .				433,452	1894,						424,036
L890, .				469,607	1895,						444,763
1891, .				429,582	1896,						434,375

Brockfield. In January, Sagendorph Mills, woollens, purchased by L. N. Taylor and leased to C. C. Maguire, formerly of Maguire & Gilmore; started up in February. February. H. H. Brown & Co. and C. H. Moulton & Co., shoes, started up on full time. March. Geo. Mann & Bro., woollens, ran on short time. - E. & A. H. Batcheller Co., shoes, began running on ten-hour time. ---- Parmenter Manufacturing Co., pottery, shut down indefinitely. - W. S. Hill Electric Co. organized to manufacture electric apparatus; purchased brick and wooden buildings. --- Brookfield Pressed Brick Co. started - Bradford Yarn Mills, woollens, leased by new company and machinery put in position. — Lasters employed by George H. Burt Co., shoes, struck because of cut in April. Alvin Hyde, boxes, started up business in new factory. - Picker building at plant of Geo. Mann & Bro., woollens, damaged by fire. May. Greyhound Bicycle Co. ran overtime. --- Parmenter Manufacturing Co., pottery, began work of consolidating three brick mills in one.—E. & A. H. Batcheller Co., shoes, shut down for stock taking. --- Picker house at plant of Geo. Mann & Bro., woollens, rebuilt and business started up on reduced scale. - Strike occurred among Italian laborers on electric June. E. & A. H. Batcheller Co., shoes, re-adjusted work and prices. - Geo. Mann & Bro., woollens, shut down indefinitely on account of dull trade. field Pressed Brick Co., shut down indefinitely. — Tyler-Moulton Shoe Co. and George H. Burt & Co., shoes, shut down indefinitely; later, George H. Burt & Co. resumed op-August. Tyler-Moulton Shoe Co. reorganized; in November, removed to West Brookfield. November. Geo. Mann & Bro., woollens, resumed operations. — E. & A. H. Batcheller Co. added new machines. — Parmenter Manufacturing Co., bricks, made improvements in plant. December. Geo. Mann & Bro. leased Sagendorph Woollen Mill.

Brockline. In April, Alexander B. Wilbor, manufacturing chemist, died, aged 69 years. August. Charles M. Smith, inventor, died, aged 51 years. October. Henry Bond, tanner, died, aged 79 years. November. William E. Shaw invented clock by which the deaf can be awakened at any desired time. — Patent granted Louis J. Hirt on mechanism for cable railways and Frederick S. Belyea on dental plugger.

www libtool com cn

CAMBRIDGE. In January, plant secured for establishment of paper box factory, - Standard Brass Co. purchased plant of Framingham Brass Manufacturing Co. and removed stock and machinery to this place. February. American Rubber Works shut down for two weeks. --- New factory building owned by Cambridge Improvement Co. destroyed by fire. - Factory of W. C. H. Badger & Co., furniture, damaged by fire. March. Rawson & Morrison, machinery, awarded contract for new building, 60 x 150 feet, two stories. - Plant of American Net & Twine Co. damaged by fire. May. William P. Greenlaw granted patent on clothes pounder. - Factory of Charles Place, paper boxes, destroyed by fire; to be rebuilt. June. Strike occurred among employés of August. Factory of American Rubber Co. Ginn & Co., publishers; settled in July. September. Contract awarded for new factory of Charles Place. resumed operations. November. Union Bottling Co. started up after three months' shutdown. -Edward L. Dwyer granted patent on street car sign. - Plant of Boston Bridge Works destroyed by fire. - Furniture factory of A. B. & E. L. Shaw and lumber plant of Parker & Page damaged by fire. December. Patent granted to Myron F. Hill on telephone exchange. - Furniture factory of Rouke & Kennedy destroyed by fire.

Canton. In February, Charles Draper, retired woollen manufacturer, died, aged 63 years. April. Robert Draper's Sons, cottons and knit goods, shut down indefinitely. June. Draper Bros. Co., hosiery and knit goods, resumed full time. — James L. Draper of Draper Bros. Co., died, aged 47 years. November. Patent granted to Cornelius Callahan on hose nozzle. — Eureka Silk Co. resumed operations in No. 3 mill.

Charlton. In April, J. O. Copp, woollens, reduced to three-fourths time. — H. I. Gould & Co., wooden boxes, destroyed by fire. May. Akers & Taylor, woollens, added card feeds: in July, shut down for repairs.

Chelmsford. In January, George C. Moore, wool scourer, added machinery. April. New saw mill of A. L. Brooks & Co. completed. September. George C. Moore, wool scourer, shut down portion of plant and reduced running time. November. Chelmsford Foundry Co. resumed operations on full time. ——George C. Moore, wool scourer, ran nights.

CHELSEA. In January, Revere Rubber Co. petitioned to increase capital stock from \$1,000,000 to \$8,000,000. February. Mahogany mill of George D. Emery damaged by fire; in March, a similar fire occurred. — Employés of Revere Shoe Co. struck for restoration of wages. April. Boston Rubber Co. became part of United States Rubber Co. and shutdown of plant occurred. May. Storehouse of Boston Rubber Co. damaged by fire. October. Erection of new factory of wood, 48 x 148 feet, two stories, begun for Martin Bros. Manufacturing Co. of Niagara Falls, N. Y., elastic webbing. November. Patent granted to Addison S. Hodges on flask for making seamless sash weights.

Cheshire. In July, stock subscribed for the establishment of new shoe factory.

Chester. In July, plant formerly operated as tannery made over into emery mill.

Chesterfield. In November, T. E. Smith, wooden goods, made repairs and improvements.

CHICOPEE. In January, Chicopee Falls Wheel Co. organized to manufacture "Chicopee" bicycle. — Stevens Arms & Tool Co. re-organized. — Taylor, Bramley, & Co., knit goods, decided to enlarge plant. --- Holyoke Card & Paper Co. completed new building. — Coghlin's Steam Boiler & Iron Works of Holyoke, purchased land in this place for February. Lamb Manufacturing Co., knitting machines, erection of mill and foundry. March. Belcher added new engine and decided to move part of plant to New Jersey. & Taylor Agricultural Tool Co. completed storehouse, 30 x 120 feet. — Jerome W. Doten, knit goods, decided to discontinue business. - Taylor, Bramley, & Co., knit goods, completed addition, 26 x 28 feet, three stories, set up machinery, and began running. ping room of Chicopee Manufacturing Co., cottons, damaged by fire. April. Lamb Manufacturing Co., knitting machinery, removed skate manufacturing department to Newark, N. J. - Dwight Manufacturing Co., cottons, shut down mule room temporarily on account of high water. May. Overman Wheel Co., bicycles, began running on summer schedule. - Factory of Belcher & Taylor Agricultural Tool Co. damaged by fire.

www libtool com en

June. Lamb Manufacturing Co., knitting machines, reduced running time to eight hours. -Factory of Dana S. Courtney, bobbins, destroyed by fire. July. James Emerson, inventor of apparatus for measuring water power, dynamometer, and system of heating cars by steam from the engine, died, aged 73 years. August. Overman Wheel Co. made repairs and shut down. ---- Stevens Arms & Tool Co. shut down for two weeks. --- Dwight Manufacturing Co., cottons, shut down its several mills alternate weeks in order to curtail production. — Chicopee Manufacturing Co., cottons, resumed operations after four September. Overman Wheel Co., bicycles, increased force. --- Conweeks' shutdown. tract awarded for re-building bobbin factory of Dana S. Courtney. - Chicopee Manufacturing Co., cottons, erected new penstocks. - Stevens Arms & Tool Co. ran on reduced time. - Dwight Manufacturing Co., cottons, and Chicopee Manufacturing Co., cottons, reduced wages. October. Lamb Manufacturing Co., machinery, increased running time and Overman Wheel Co. increased force. November. Overman Wheel Co., bicycles, ran overtime. — Jonathan R. Whittemore, manufacturer of agricultural implements, died, aged 74 years.

Clinton. In January, Witherell Shoe Co. shut down indefinitely. --- Clinton Worsted Co. changed from overtime to regular hours. February. Bigelow Carpet Co. reduced force because of dull trade. - Wekepeke Woollen Co. reduced wages of weavers on account of dull market. March. Bigelow Carpet Co. reduced running time on account of scarcity of orders. - Lancaster Mills, cottons, shut down on account of high water; later received new looms. April. Carding and spinning rooms of Wekepeke Woollen Co. ran 24 hours per day. - Clinton Worsted Co. reduced running time to 40 hours per week. - Bigelow Carpet Co. reduced running time to three days per week; in May, returned to full time. May. John D. Missroon granted patent on slate picker; assigned to Clinton Wire Cloth Co. June. Lancaster Mills, cottons, added new machinery. - Clinton Worsted Co. made improvements in boiler plant. - Bigelow Carpet Co. shut down temporarily for repairs. July. Smiley Manufacturing Co., clothing, shut down temporarily. - Gilbert M. Mason invented ironing board for special clothing. -Clinton Wire Cloth Co. shut down portion of plant. August. Weaving departments Nos. 2 and 3, Bigelow Carpet Co., shut down indefinitely; department No. 1 ran with reduced force. - Lancaster Mills, cottons, shut down temporarily for repairs on engine. - September. Gibbs Loom Harness & Reed Co. erected addition, 15 x 20 feet, October. Weaving department of Bigelow Carpet Co. ran on reduced two stories. time; in November, worsted department resumed operations. November. Plant of Deershorn Comb Co. destroyed by fire. December. Plant of Clinton Absorbent Cotton Co. leased by Clinton Batting Co. and manufacture of cotton batting begun. --- Clinton Wall Trunk Manufacturing Co. shut down portion of plant and reduced force .-Bigelow Carpet Co. shut down temporarily and resumed with reduced force. occurred among weavers at Lancaster Mills, ginghams. — J. B. Parker Machine Co. shut down indefinitely.

Conway. In July, box factory of A. C. Kennett started up after shutdown for a year and one-half. - Work begun on new shoe factory of DeWolf & Bagwell of Marlborough. August. Manufacture of wooden handles established by A. G. Reed. October. Boiler and electric lighting system placed in new shoe factory of DeWolf & Bagwell; in November, factory completed.

Cummington. In January, Scott Jenks purchased plant and established manufacture of wooden goods. August. Turning shop and saw mill of Chilson & Reed destroyed by fire.

Dalton. In January, Dalton Shoe Co. began manufacture of new line of goods. February. Dalton Shoe Co. ran overtime. March. Byron Weston Paper Co. ordered two new water-wheels for Defiance Mill. May. Contract for government paper awarded Crane & Co. June. Old Berkshire Mills Co. shut down engine and machine rooms for repairs. July. Bay State Mill, paper, shut down temporarily. Z. & W. M. Crane, paper, built new boiler house and put in new water-wheels. -Berkshire Mills Co., paper, resumed after eight weeks' shutdown. - Byron Weston Paper Co. resumed operations after three weeks' shutdown. September. Defiance Mill of Byron Weston Paper Co. resumed operations after two months' suspension. October. Renfrew Manufacturing Co., cottons, resumed operations after seven weeks' idleness. -Old Berkshire Mills Co., paper, resumed after shutdown for repairs. November.

Dalton Shoe Co. ran nights. December. Dalton Shoe Co. added new dynamo. — Renfrew Manufacturing Co., cottons, shut down for one week and resumed.

Dans. In March, Henry W. Goodman & Co., straw goods, increased force; in May, shut down. July. North Dana Mills, woollens, shut down for repairs. August. Henry W. Goodman & Co., straw goods, built addition to factory. October. Crawford & Tyler, woollens, resumed operations after suspension of two and one-half months.

Danvers. In Fébruary, Donovan & Shea established the manufacture of shoes.—Albert C. Allen, retired shoe manufacturer, died, aged 78 years. April. Bernard & Friedman, leather, erected brick building to be used as tannery for colored leather.—Chandler C. Farwell of C. C. Farwell & Co., shoes, died, aged 69 years.—Grain mill of J. V. & J. Hanson destroyed by fire.—Morocco factory of Albert A. Bates damaged by fire; to be rebuilt. May. Members of hook and ladder company struck for more pay. June. Repairs made at morocco factory of Albert A. Bates.—Henry Sawyer, builder of Sawyer leather measuring machine, died, aged 42 years. July. C. C. Farwell & Co., shoes, shut down for inventory. August. Bernard & Friedman, morocco, began manufacture of patent leather.—A. G. Cherbuy established tannery. September. C. C. Farwell & Co., shoes, reduced wages. December. N. T. Walcott and E. F. Colcord began manufacture of heels.—William H. Burns, shoes, shut down indefinitely.

Dedham. In January, Chelsea Pottery Co. started up business in new factory. April. An addition of brick, 50 x 80 feet, built at Norfolk Mills, carpets; in June, improvements made in water service and new dam built; in July, new machinery added. July. Merchants Woollen Co. increased production by addition of spinning machinery; in October, put in new flume and water-wheel.

Deerfield. In July, Arms Manufacturing Co., wallets, shut down for two weeks and resumed.

Dighton. In May, Mount Hope Thread Mill started up by G. L. Macy of New Bedford; improvements in fire protection service made and 2,700 spindles added.

Douglas. In January, Wm. E. Hayward & Co., woollens, added three sets of cards; in May, added new feeds and made improvements in fire protection service; in June, shutdown of plant occurred. August. American Axe and Tool Co. ran on short time. — Improvements made at woollen mill of Wm. E. Hayward & Co. September. Bevel tool department of American Axe and Tool Co. shut down for two weeks and resumed. — Wm. E. Hayward & Co. resumed operations on reduced time after two months' shutdown. November. American Axe and Tool Co. started up on full time. — Wm. E. Hayward & Co., woollens, started up on full time; fire occurred in picker room.

Dracut. In April, Michael Collins, woollens, shut down on account of dull trade; in July, resumed operations. July. Paper mill of M. L. Bassett & Co. damaged by fire. August. Michael Collins, woollens, resumed operations on reduced time. — Merrimack Woollen Mills shut down for one month; company reorganized as Merrimack Woollen Mills Co.

Dudley. In February, David W. Perry, retired hosiery manufacturer, died, aged 76 years. May. Wm. J. Warren, paper, shut down for repairs; in June, resumed operations. June. Stevens Linen Works shut down for repairs; in July, resumed operations; in August, reduced running time to three days per week; in November, resumed full time.

East Bridgewater. In April, Carver Cotton Gin Co. reduced force slightly, owing to lack of orders. May. Edgar E. Worcester granted patent on lasting machine; assigned to Consolidated Hand Method Lasting Machine Co. September. Carver Cotton Gin Co. reduced force; in November, resumed full time. — George I. Loucraft, brick manufacturer, died.

Easthampton. In February, machinery set up in new mill of Sawyer & Wolfe; in March, started up.

April. George S. Colton, elastic cords, Glendale Elastic Fabric Co., and Nashawannuck Manufacturing Co., suspenders, ran on short time.

July. Glendale

Elastic Fabric Co. resumed full time. — Easthampton Spinning Co. shut down one week for repairs. August. Williston & Knight Co., buttons, shut down for repairs and resumed. — Ionic Knitting Co. shut down. — Nashawannuck Manufacturing Co., suspenders, made repairs on dam. November. George S. Colton, elastic cords, resumed full time. — E. A. Brown & Co., wagons, removed from Palmer to this place; plans made for erection of new factory of brick, 38 x 76 feet, two stories.

Easton. In January, Welch-Brush Co., shoes, shut down indefinitely; in April, succeeded by Welch Shoe Co.; incorporated; capital stock, \$5,000. September. Williams Organ Factory completed and business started up.

Enfield. In June, Enfield Manufacturing Co., woollens, shut down indefinitely on account of dull trade; in October, resumed. October. Swift River Co., woollens, started up.

Essex. In March, saw mill of Gates Bros. destroyed by fire. July. Essex Shoe Co. resumed operations after interval of six months.

EVERETT. In February, piano factory of O. J. Faxon & Co. damaged by fire. July. Pratt, Bailey, & Co., knit goods, ran with reduced force. November. Patent granted to Avard E. Finley on railway switching apparatus.

FALL RIVER. In January, American Printing Co. increased capacity. -- Twostory building at Durfee Mills completed; to be used as storehouse and machine shop. Accident to engine at Globe Yarn Mill No. 2 caused shutdown for repairs. — Timothy Sullivan granted patent on device for preserving the edges of cloth while weaving .-Stafford Mills Co. bought additional land for erection of new weave shed. --- Plans made for manufacture of absorbent cotton in Quequechan Mill. -- Dyers employed by American Printing Co. struck because of reduction in pay; settled. February. Broken belts caused partial shutdown for repairs at Parker Mill. - Narragansett Mills added machinery .---- Plans made for erection of brewery plant .---- American Printing Co. attempted to create market by reducing selling price of goods. — American Linen Co. and Granite Mills made additions to card rooms. --- Work on foundation of addition to Barnard Manufacturing Co. begun; building to be 148 x 360 feet, two stories. ----W. Evans granted patent on shedding mechanism for looms. - Richard Borden Manufacturing Co. damaged by fire and water .--- Weavers at Hargraves Mills struck in protest against fines system; settled. --- At mills of Fall River Iron Works Co. weavers refused to work overtime and speeder tenders struck against reduction. March. Parker Manufacturing Co., King Philip, and Durfee Mills added new machinery. - Joseph Lacroix received patent on new kind of rubber boot. - Fall River Iron Works Co. petitioned Legislature for right to increase capital stock to \$4,000,000; granted in April. --- Otis E. Dubois received patent on improved rope clamps which grip automatically. mill of J. H. Estes & Son and waste room of Union Mill No. 2 damaged by fire. April. American Linen Co. added two new boilers. - Shove Mills added drawing machinery and Davol Mills added spinning frames. — Fall River Iron Works Co. resumed operations after week's shutdown for repairs. — Accidents to machinery caused shutdown for repairs at mills of Sagamore and Metacomet Manufacturing Cos. --- Kilburn, Lincoln, & Co., machinery, licensed by Northrup Loom Co. to attach the Draper shuttle feeding and warp stop mechanism to the Northrup loom. - Mills of American Printing Co. and portion of weaving department of King Philip Mills shut down indefinitely. --Small Bros., frame manufacturers, began erection of addition to works. ---- Stock of Fall River Manufactory damaged by fire. --- Strike of back-boys caused stoppage of work in spinning department of Border City Manufacturing Co. — Weavers at Hargraves Mills struck because of dissatisfaction with wages. May. Stafford Mills corporation decided to increase capital stock from \$800,000 to \$1,000,000, and to build new counting room, 34 x 54 feet, two stories. - Troy Cotton & Woollen Manufacturing Co. decided to enlarge building, 60 x 89 feet, two stories, occupied by Union Belting and American Supply Cos., by addition of two stories. - Patent granted to C. F. Cowdrey on wheel rim. - Fians, Fraser, & Blackway, machinery, purchased plant of Reid & Creighton. — Following corporations added machinery: Richard Borden Manufacturing Co., American Linen Co., Metacomet Manufacturing Co., Globe Yarn, Weetamoe, Conanicut, Merchants, and Hargraves Mills. - Slade Mills added new engine. - Chace Mills shut down temporarily, and Jesse Eddy Manufacturing Co., woollens, and American Printing Co. shut down

indefinitely. River Manufactory, Durfee Mill No. 2, and card room of Iron Works Mill No. 2, --- Philip D. Borden of Fall River Iron Works Co., died, aged 80 years. --- Strike occurred among spinners at Davol Mills: settled .--- Weavers at Hargraves Mills and Parker Manufact. uring Co. struck; settled in June. June. American Printing Co. started up in part. -Eddy Manufacturing Co., woollens, added new looms, --- Barnard Manufacturing Co. added new engine. - New machinery added as follows: Richard Borden Manufacturing Co., Davol. Merchants, Mechanics, and Hargraves Mills, --- Shutdowns for repairs occurred as follows: Barnaby Manufacturing Co., Sagamore Manufacturing Co., and Chace Mills. - Annawan Manufactory shut down indefinitely. - Ring spinners employed at Robeson Mills and warper tenders at mills of American Linen Co. struck. July. American Linen Co. awarded contract for new chimney 200 feet high. --- W. E. Sharples improved separators used on spinning frames. - New office at Stafford Mills completed. - Globe Yarn Mills, Sagamore Manufacturing Co., and Pocasset Manufacturing Co. added new machinery. - Troy Cotton & Woollen Manufacturing Co. made changes and improvements. - Kerr Thread Co. shut down temporarily. - On account of dull trade and in order to curtail production, following cotton manufacturing firms agreed to shut down during four weeks in July and August, running one week and shutting down one week alternately: American Linen Co., Barnaby Manufacturing Co., Barnard Manufacturing Co., Border City Manufacturing Co., Bourne Mills, Consulcut Mills, Cornell Mills, Davol Mills, Durfee Mills, Fall River Iron Works Co., Fall River Manufactory, Flint Mills, Granite Mills, Hargraves Mills, King Philip Mills, Laurel Lake Mills, Mechanics Mills, Merchants Manufacturing Co., Metacomet Manufacturing Co., Narragausett Mills, Osborn Mills, Pocasset Manufacturing Co., Richard Borden Manufacturing Co., Robeson Mills, Sagamore Manufacturing Co., Seaconnet Mills, Shove Mills, Slade Mills, Stafford Mills, Stevens Manufacturing Co., Tecumseh Mills, Troy Cotton & Woollen Manufacturing Co., Union Cotton Manufacturing Co., Wampanoag Mills, and Weetamoe Mills. -- Storehouse of Granite Mill No. 3 and building occupied by Covel Machine Co. and Covel & Osborn, machinery, damaged by fire. August. Algonquin Printing Co. ran overtime. — Repairs made at Conanicut Mills. Mechanics Mills added new boilers and Merchants Manufacturing Co. added new carding -Joseph Bolton, inventor of system of weaving fine numbers on coarse cloth, erected shed, 26 x 28 feet, in which to make experiments. - Following mills continued shutdown during fifth week: Chace Mills, Durfee Mills, Laurel Lake Mills, Sagamore Manufacturing Co., Wampanoag Mills, and Weetamoe Mills.--Fall River Manufactory continued shutdown during seventh week. --- Bourne and Robeson Mills shut down indefinitely. --- Kerr Thread Co., Globe Yarn Mills, and Sanford Spinning Co. shut down alternately according to agreement in order to curtail production .-September. Parker Manufacturing Co. ran overtime. Strike occurred among masons. -W. C. Powers erected factory for manufacture of roll-covering. ting down was continued by the following corporations: American Linen Co., Border City Manufacturing Co., Bourne Mills, Chace Mills, Comanicut Mills, Cornell Mills, Durfee Mills, Fall River Iron Works Co., Fall River Manufactory, Flint Mills, Granite Mills, King Philip Mills, Laurel Lake Mills, Mechanics Mills, Merchants Manufacturing Co., Metacomet Manufacturing Co., Narragansett Mills, Pocasset Manufacturing Co., Richard Borden Manufacturing Co., Robeson Mills, Sagamore Manufacturing Co., Seaconnet Mills, Slade Mills, Stafford Mills, Stevens Manufacturing Co., Troy Cotton & Woollen Manufacturing Co., Wampanoag Mills, and Weetamoe Mills. - James C. Eddy of the Jesse Eddy Manufacturing Co., died, aged 67 years. October. Tecumseh Mills added new machinery. --- Barnard Manufacturing Co. placed looms in new weave shed. — Kelly Shoe Co. organized; capital stock \$30,000. — American Linen Co. installed electric lighting plant and completed new chimney. — Parker Manufacturing Co. discontinued overtime work .- Fall River Machine Co. reduced running time. - Fall River Manufactory and Metacomet Manufacturing Co. shut down indefinitely. --- Suspensions for repairs occurred as follows: American Linen Co., American Printing Co., Chace Mills, Merchants Manufacturing Co., and Metacomet Manufacturing Co. ---- Strike occurred among weavers at Stevens Manufacturing Co.; settled. November. Patent granted to Julius M. Weaver on apparatus for leveling silk thread; to Samuel H. Dubois on ring spinning frame; to Joseph Hampson on loom harness. - Kerr Thread Co. resumed full -New spinning frames placed in No. 4 mill of Fall River Iron Works Co. American Printing Co. ran on reduced time. - Fall River Manufactory shut down temporarily. — Waste mill of J. H. Estes & Son damaged by fire. — Strike occurred in spooling department of Stafford Mill No. 2. December. Robeson Mills resumed operations. — Tecumseh and Granite Mills added new machinery. — Merchants Manufact-

www.libtool.com.cn

uring Co. placed new engine in No. 8 mill. --- Plant of Algonquin Printing Co. damaged by fire. — During past year amount of time lost by shutdowns was as follows: American Linen Co., ten weeks; Annawan Manufactory, eight months; Barnard Manufacturing Co., four weeks: Border City Manufacturing Co., eight weeks: Bourne Mills, two weeks: Chace Mills, seven weeks; Conanicut Mills, Cornell, and Davol Mills, four weeks each; Durfee Mills, six weeks: Fall River Manufactory and Flint Mills, seven weeks: Globe Yarn Mills, four weeks; Granite Mills, five weeks; Hargrayes Mills, four weeks; Kerr Thread Co., three days per week for four months: King Philip Mills, four weeks: Laurel Lake and Mechanics Mills, six weeks each; Merchants Manufacturing Co., nine weeks; Metacomet Manufacturing Co., eleven weeks; Narragansett Milis, three and one-half weeks; Osborn Mills, four weeks; Pocasset Manufacturing Co., seven weeks; Richard Borden Manufacturing Co., four weeks; Robeson Mills, six months; Sagamore Manufacturing Co., nine weeks; Sanford Spinning Co., six weeks; Seaconnet Mills, four weeks: Shove Mills, four weeks: Slade Mills, five weeks: Stafford Mills, six weeks: Stevens Manufacturing Co., six weeks; Tecumseh Mills and Troy Cotton & Woollen Manufacturing Co., four weeks each; Union Cotton Manufacturing Co., five weeks; Wampanoag and Weetamoe Mills, eight weeks each. Average shutdown time about seven weeks.

The annual cloth statement, issued by Clinton V. S. Remington, for 1896, showed a production of 10,055,000 pieces, a decrease, as compared with 1895, of 1,035,000 pieces, or 9.33 per cent. Sales for the year were 7,819,000 pieces, of which 5,668,000 pieces were "odd" and 2,151,000 pieces were 64x64s. This shows a decrease, as compared with 1895, of 2,052,000 pieces, or 20.79 per cent. There were 1,001,000 pieces sold for future delivery as against 1,125,000 pieces in 1895, a decrease of 124,000 pieces, or 11.02 per cent. The average price paid during the year was .026001, the highest 3 cents and the lowest 2 7-16 cents. The following table shows production and sales since 1891:

			NUMBER	of Pieces		
CLASSIFICATION.	1891	1892	1898	1894	1895	1896
Total production,	9,985,000	10,045,000	9,065,000	8,478,000	11,090,000	10,055,000
Sales:			i			
Odd,	4,423,000	5,547,000	4,245,000	5,062,000	6,576,000	5,668,000
60 x 56,	125,000	173,000	-	-	-	-
64 x 64,	4,290,000	5,039,000	2,874,000	3,269,000	3,295,000	2,151,000
On hand at close of year, .	99,000	7,000	142,000	140,000	287,000	1,802,000
Stock in United States at close of year,	278,000	9,000	340,000	211,000	464,000	2,300,000
Sold for future delivery, .	1,375,000	2,850,000	950,000	1,300,000	1,125,000	1,001,000

In order to show the production of print cloth by months, the following table is introduced, in which is given the number of pieces produced during each month in each of the years specified:

Month	_		NUMBER OF PIECES PRODUCED DURING EACH MONTH SPECIFIED I										
MONTH	5.		1890	1891	1892	1893	1894	1895	1896				
January, .		•	770,000	1,000,000	920,000	720,000	770,000	830,000	870,000				
February,			800,000	800,000	780,000	750,000	800,000	880,000	1,100,000				
March, .			975,000	790,000	790,000	780,000	1.010.000	1,100,000	860,00				

			Numbe	B OF PIECE	s Produce	DURING 1	EACH MONT	TH SPECIFIE	D IN
Months.	Ionths.		1890	1891	1892	1898	1894	1895	1896
April, .			765,000	770,000	985,000	945,000	800,000	820,000	855,000
Мау,			1,015,000	1,000,000	790,900	760,000	840,000	880,000	1,150,000
June,			795,000	750,000	765,000	730,000	990,000	1,050,000	880,000
July,			755,000	770,000	950,000	905,000	740,000	840,000	530,000
August, .			837,000	970,000	760,000	580,000	625,000	1,100,000	465,000
September,			805,000	730,000	725,000	585,000	63,000	810,000	560,000
October, .			650,000	950,000	950,000	720,000	175,000	880,000	1,115,000
November,			970,000	780,000	730,000	760,000	· 745,000	1,060,000	865,000
December,			800,000	725,000	920,000	880,000	920,000	840,000	805,000
TOTALS,			9,937,000	9,985,000	10,045,000	9,065,000	8,478,000	11,090,000	10,055,000

FITCHBURG. In January. E. J. Welch & Co., brass founders, made addition to foun-February. Colburn Electric Manufacturing Co., dynamos, ran overtime and began erection of machine shop, of brick, 43 x 156 feet, two stories. - John Becker Manufacturing Co., machinery, Fitchburg Machine Works, and finishing department of Beoli Mills, woollens, ran overtime. - Iver Johnson Arms & Cycle Co. ran nights. -George W. Wheelwright Paper Co. ran on short time. March. Parkhill Manufacturing Co., cottons, reduced running time to five days of eight hours; in May, changed to four days of ten hours. May. Hardy & Pinder, metal screen plates, doubled capacity of plant. - Executors of estate of George F. Simonds, deceased, granted patent on mechanism for grinding anti-friction balls. — Iver Johnson Arms & Cycle Co. made plans for erection of new building, 100 x 160 feet, five stories. June. Star Worsted Co. added new engine of 150 horse power. - Fitchburg Manufacturing Co., cottons and woollens, -Beoli Mills, woollens, resumed operations after two advanced wages of weavers. -July. Fitchburg Manufacturing Co., cottons and woollens, added new machinery. - George W. Wheelwright Paper Co. attached recently patented device to Fourdrinier machine. --- Grant Yarn Co. and Orswell Mills, cottons, ran on reduced time. — Fitchburg Duck Mills shut down for repairs. — Nockege Mills, cottons, shut down indefinitely. August. New factory established for manufacture of ramie yarn by Henry - Beoli Mills, woollens, started up after two weeks' shutdown. - Mills A and B of Parkhill Manufacturing Co., cottons, shut down indefinitely. --- Force reduced at car shops of Fitchburg Railroad. - George P. Grant, president of Grant Yarn Co., died in Boston, aged 52 years. September. Nockege Mills, cottons, resumed operations after nine weeks' shutdown. October. Mill A of Parkhill Manufacturing Co., cottons, started up after six weeks' suspension. --- Mill of Fitchburg Paper Co. damaged by fire. vember. Patent granted Albert A. Holt on vehicle running gear. - Fitchburg Worsted Co. shut down temporarily for repairs. December. Star Worsted Co. ordered new machinery.

Framingham. In January, plant of Framingham Brass Co. purchased by Standard Brass Co. of Cambridge, and stock and machinery removed to that place. - Plant formerly used as rubber factory secured by Singer Bicycle Co. of Coventry, England, for establishment of branch factory. February. Gregory, Shaw, & Co., shoes, ran on reduced time. March. Dennison Manufacturing Co., paper goods, purchased plant in this - Saxonville Woollen Mills ran on reduced time. April. Parmenter & McBride of Sudbury, confectionery, secured factory for removal of business to this place .-Rival Brass Co. shut down indefinitely. — Patent granted to Harry Puddefoot on grip July. H. H. Wilcox of Boston, established mechanism to be used in shoe manufacture. manufacture of calendar pads in this place. August. Plans made for two new buildings at plant of Para Rubber Co. to be occupied by Dennison Manufacturing Co.; one to be 50 x 180 feet; the other, 51 x 128 feet. - Factory of Bay State Manufacturing Co., leather goods, shut down. October. Saxonville Mills, woollens, resumed operations after three weeks' shutdown for repairs. - Rival Brass Co. shut down indefinitely. November. Strike occurred at factory of Gregory, Shaw, & Co., shoes. Patent granted to Edward G. Gallagher on boot or shoe.

Franklin. In January, Boston Rubber Co. shut down indefinitely. ---- Ray's Woollen Co. shut down for repairs and installation of new looms. March. H. T. Hayward, woollens, shut down part of weaving department for repairs. April. Franklin Cotton Manufacturing Co. voted to enlarge plant and change product from cottons to woollens. - Ray's Woollen Co. decided to erect new dyehouse. - Edwin F. Trowbridge of Trowbridge Piano Co., died, aged 60 years. - Picker room of Waite Felting Co. damaged by fire. May. Ray's Woollen Co. shut down indefinitely: new machinery added. - June. Waite Felting Co. began erection of new mill. -- H. T. Hayward, woollens, shut down indefinitely; in August, resumed operations. August. Ray Fabric Mills, woollens, re-September. Ray's Woollen Co. completed erection of new dyesumed operations. -Singleton Worsted Co. ran overtime. November. Patent granted to Charles H. Woodbury on clutch for card feeding machines. - H. T. Hayward, woollens, shut down indefinitely. December. Clark Bros., machinery, built addition. - Ray's Woollen Co. installed blower system.

Gardner. In February, creditors of Central Oil-Gas Stove Co., which assigned in November 1895, formed new corporation with same name and purchased plant of former company.

March. Woodworking business of Joel Sibley moved from Winchendon to this place.

April. Wright, Bead, & Co., chairs, decided to discontinue manufacturing. September. Gardner, Westminster, & Fitchburg Electric Railway Co. formed; capital stock \$100.000.

November. Patent granted to Theodore L. Harlow on brush cleaner.

Georgetown. In January, box factory of Willard C. Hardy shut down for repairs. - George W. Chaplin & Co., shoes, added new sole-tacking machine. M. Brewster, shoes, changed to Hardy & Brewster. March. Pentucket Shoe Co. organized under laws of New Hampshire: capital stock \$15,000. April. A. B. Noves & Co., shoes, shut down temporarily. - Hardy & Brewster, shoes, started up. Halliday & Preble established manufacture of shoes. - Pentucket Shoe Co. set up new machinery. June. A. B. Noyes & Co., shoes, shut down temporarily; in July, added new machinery. July. Georgetown Boot & Shoe Co. and Halliday & Preble each closed for one week. August. A. B. Noyes & Co., shoes, shut down for a few days and re-September. Willard C. Hardy, boxes. sumed. - Halliday & Preble, shoes, dissolved. increased output. October. Georgetown Boot & Shoe Co. erected new chimney 60 feet November. A. B. Noyes & Co., shoes, ran on reduced time; in December, shut down for one week and resumed. December. Strike occurred at factory of Georgetown Boot & Shoe Co.; settled,

GLOUCESTER. In January, Lanesville Granite Co. closed operations owing to depression in business. February. Stock subscribed for establishment of Drop Forge Works by Bagnall-Loud Block Co. of Boston. — Glue and isinglass factories of George J. Tarr & Co. destroyed by fire. May. Drop Forge Works started up manufacture of newly invented sheave for use on ship-board. — Laborers employed in construction of Gloucester & Rockport Street Railway Co. struck for more pay. July. George J. Tarr & Co. began erection of glue and isinglass factory to replace one destroyed by fire in February. August. Gardner A. Churchill of Rockwell & Churchill, printers, Boston, died. — Strike of journeymen sailmakers occurred; settled in October. November. Gloucester Not & Twine Co. resumed operations after few weeks' idleness.

Grafton. In February, S. A. Forbush, shoes, ran overtime. — Edge finishers at factory of J. S. Nelson & Son Shoe Co. struck; settled. March. Wages reduced at Farnumsville Cotton Mill. May. J. S. Nelson & Son Shoe Co. shut down for stock taking. — Wm. Paton, shoe strings, shut down one week for repairs. July. Saundersville Cotton Mill shut down for one week on account of dull trade; resumed. August. Farnumsville Cotton Mill shut down indefinitely. December. J. S. Nelson & Son Shoe Co. resumed full time.

Great Barrington. In January, Endrick Woollen Co. organized. ——Arrangements made for starting up mills of Owen Paper Co. after shutdown of two years. February. Riverdale Mills, cottons, added new looms. April. Strike for shorter working-day occurred among masons. May. Endrick Woollen Co. ran full; in June, reorganized. November. Riverdale Mills, cottons, ran overtime. December. Endrick Woollen Co. resumed operations after shutdown.

Greenfield. In February, Pierce-Davenport Co. organized to manufacture lubricant for bleycles. — Charles R. Field, children's carriages, died, aged 68 years. March. R. H. Eddy & Son, wood turners, added 20 horse power boller and engine. April. Cutler, Lyons, & Field, shoes, ran with reduced force. May. Wells Bros. & Co., machinery, began erection of new building, 80 x 100 feet. — Wiley & Russell Manufacturing Co., machinery, began erection of brick building to replace wooden ones, 50 x 180 feet, two stories. June. Cutler, Lyons, & Field, shoes, shut down for inventory. August. Franklin Shoe Co. reorganized. December. James L. Thayer established manufacture of shoes. — Franklin County Lumber Co. began erection of addition to factory.

Groveland. In November, Veazie & Hale started up Groveland Mills, woollens, on full time

Hadley. In September, Crosier & Sons established manufacture of fish poles.

Hampden. In August, Hampden Woollen Co. ran overtime.

Hardwick. In January, George H. Gilbert Manufacturing Co., woollens, added new machinery. October. Joseph Lamontagne received patent on paper pulp engine.

Hatfield. In July, grist mill destroyed and Porter Machine Works damaged by fire.

HAVERHILL. In January, Perley Weeks, shoes, restored prices. -Briggs, leather, increased power and ran overtime. - Business of E. P. Wentworth, cut soles, continued by Arthur D. Wentworth. - Towle & Dow, shoes, of Northwood, N. H., returned to this place. - French & Neal, heels, dissolved; business continued by J. G. French as J. G. French & Co. - Charles H. Goodwin & Co., shoes, moved to Holliston. --- Nathaniel K. Johnson of Hodgdon & Johnson, shoes, died, aged 67 years. -James H. Winchell of J. H. Winchell & Co., shoes, died, aged 62 years; business continued by remaining partners under same style. February. Blake Bros., shoes, added manufacture of men's goods. - T. M. Arnold & Co. established manufacture of cut soles. -- W. H. Davis & Co., shoes, dissolved; business continued by W. H. Davis. -Perley Weeks, shoes, secured additional quarters. — C. A. Ellis. shoes. became member of Gale Shoe Co.; business to be continued till May 1. - M. A. Howe & Co., paper boxes, damaged by fire. March. Elmer S. Harris granted patent on inseam trimming machine and Alby S. Harris on carriage for rounding out machines; both used in shoe manufacture. - T. M. Arnold & Co. purchased building, 55 x 79 feet, for cut sole factory. - J. H. Robbins & Son established manufacture of carriages. - Freeman Bros., shoes, removed from Portland, Me., to this place. - Rosemont Carriage Co. increased facilities. --- Nichols & Jackson established manufacture of brooms. --- Power furnishing plant of Chase & Laubham and C. H. Hayes, boxes, shut down for repairs. -Woodman & Hubbard, shoes, succeeded by S. Frank Woodman. - Stevens & Co., woollens, Chase & Laubham, power, W. B. Thom & Co., hats, Neal & French, heels, C. P. Bullen and F. N. Livingston & Co., findings, Searl & Webster, H. B. Goodrich & Co., Thayer & Maguire, Blake Bros., and Hodgdon & Johnson, shees, Gale Shoe Co., and other firms damaged by flood and temporary shutdowns occurred in consequence. --- Chesley & Rugg, shoes, damaged by fire. April. Plans made for addition, 40 x 100 feet, seven stories, to shoe factory of J. H. Winchell & Co. - J. C. Dow & Co., tips, and Thomas M. Arnold & Co., cut soles, moved into new quarters. --- Eleven firms manufacturing shoe tips made an agreement to shut down on Saturday. May. Stevens & Co., woollens, decided to put new looms in old glass factory and increase force. - Portion of plant of Stewart & Potter Last Co. of New York, established in this place. — George B. Case, shoes, changed from contract work to personal manufacture. - E. S. Harris & Co., shoes, discontinued manufacture; machinery sold to A. J. Tilton. - Bray Bros., cut soles, dissolved; business continued by E. A. Bray and W. S. Bray separately. — S. C. Bassett & Co., slippers, dissolved. — Blake Pattern Co. added new last lathe. — J. A. Dalrymple & Co., shoe trimmings, enlarged space. - Repairs made at factory formerly occupied by Miller & Foster. - Greeley, Hilliard, & Smith, shoes, moved into new - Luther Day, shoe manufacturer, died, aged 65 years. - Edmund K. Appleton, formerly of Appleton & Bassett, shoes, died, aged 27 years. - Eben D. Bailey, formerly of Hersey, Bailey, & Co., died, aged 78 years. — Factory of A. Currier & Son, shoes, damaged by fire. June. Lennox & Briggs, morocco, secured larger quarters. - Chas. W. Arnold, shoes, increased force. - John H. Connor, shoes, discontinued

214 STATISTICS OF MANUFACTURES. [Pub. Doc. www.libtool.com.cn

manufacturing. - H. M. Vine retired from firm of A. E. Fernald & Co. - L. Johnson & Son, shoes, reduced force. - S. C. Bassett & Co., shoes, dissolved; business continued by S. C. Bassett under same style. - Hilliard & Taylor, shoes, and Kennedy & Newton, July. F. M. Hodgdon succeeded Hodgdon & Johnson, shoes. leather, damaged by fire. -Ellis & Mason, cut soles, secured exclusive right to manufacture patent corrugated innersoles. - J. H. Winchell & Co., shoes, shut down for stock taking. - Blake Bros., shoes, retired from business. --- Building occupied by Lennox & Briggs, morocco, and August. Charles F. Lambert received Chase & Laubham, power, destroyed by fire. patent on heel-compressing machine. - Frank Collins established manufacture of shoes. -Wm. Leighton and Harris W. Spaulding admitted to firm of W. W. Spaulding, shoes; style changed to W. W. Spaulding & Co. --- Henry L. Harris, shoes, leased factory at Derry, N. H., for removal of business to that place. - Spaulding & Swett, shoes, removed to Wolfborough, N. H. -- E. W. Noyes, shoes, removed to Stoneham. -- Watson & Young, shoe findings, dissolved; business continued by Frank E. Watson. -- Lennox & Briggs, morocco, moved into new quarters. - J. H. Winchell & Co. and Chick Bros., shoes, reduced wages. --- Chesley & Rugg, shoes, shut down temporarily on account of heat. - Factory of J. J. Brimblecom, shoes, destroyed by fire. - Factories of Fred. K. Brooks, slippers, and A. R. Wade, heels, damaged by fire. Sentember, W. P. Webster established manufacture of shoes. - R. I. Adams established manufacture of felt shoes. --- Wilbur H. Gould and M. C. Cram & Co., shoes, moved into new quarters. - Knipe Bros., shoes, reduced force. October. New addition to factory of J. H. Winchell & Co., shoes, completed and business started up. - Greeley, Hilliard, & Smith, shoes, dissolved; new firm formed, Tilton, Hilliard, & Smith; later, removed to new quarters. - Henry L. Harris, shoes, removed to Derry, N. H. - Samuel M. Whitmore, bricks, shut down on account of lack of orders. — Alpheus Currier of firm of A. Currier & Son, shoes, died, aged 79 years. November. Patent granted to Milton Chase and M. H. Foster on skiving machine, - Alexander Roberts purchased factory and removed woollen manufacturing business into new quarters; style changed to A. Roberts & Co. - W. B. Thom & Co., hats, discharged employés. December. F. E. Bridges established manufacture of shoes. - Coggswell Bros., slippers, removed from Exeter, N. H., to this place. — John W. Russ, shoes, ran nights. — Elbridge L. Dresser, retired shoe manufacturer, died, aged 87 years. -- Number of cases of shoes shipped during 1895 and 1896 were as follows:

Months.		1895	1896	Months.		1895	1896
January, .		29,857	38,709	August, .		23,500	22,688
February, .		29,519	84,411	September,		20,856	21,617
March, .		47,275	36,668	October, .	.	20,847	.26,327
April,		42,056	47,572	November,		25,546	21,227
Мау,		51,276	33,361	December,		23,875	43,143
June,		31,599	30,706	TOTALS,		366,910	886,123
July,		20,704	29,694				

Increase in 1896 over 1895, 19,213 cases; or 5.24 per cent. Reckoning 40 pairs to a case, there were in 1895, 14,676,400 pairs shipped, and in 1896, 15,444,920 pairs.

Hinsdale. In June, Hinsdale Bros., woollens, ran on short time; in July, shut down indefinitely; in November, started up portion of machinery on pattern work.

Work. February. Goeres Bros. established manufacture of shoes in this place. — T. J. Strickland of Strickland & Pierce, shoes, died. — J. B. Billings & Co., shoes, damaged by fire. April. Thos. White & Co., shoes, and Paine Shoe Co. ran nights to fill orders. May. O'Neill Shoe Co. incorporated; capital stock \$5,000. August. Thomas White & Co., shoes, resumed operations after several weeks' shutdown for repairs. September. Paine Shoe Co. reduced force.

Holden. In March, plants of East Lake Woollen Co., Jefferson Manufacturing Co., North Woods Woollen Co., and Cyrus G. Wood, woollens, damaged by flood. April.

Two story shoddy mill operated by Courtney & Reynolds destroyed by fire. July.

Jefferson Manufacturing Co., woollens, reduced running time to three days per week.

Hellisten. In January, Charles H. Goodwin & Co., shoes, removed from Haverhill to this place. May. John Clancy, shoes, added new treeing machines. July. Harness factory of Hughes & Co. shut down; resumed operations in November. August. C. F. Driscoll, shoes, shut down.

HOLYOKE. In January, Barlow Manufacturing Co. of Boston, a new corporation, began manufacture of adjustable window fixtures. - New addition to Lyman Mills, cottons, completed and machinery set up. --- Holyoke Paper Co. changed from part to full -C. H. Baush of C. H. Baush & Sons, machinists, died. February, Merrick Thread Co. equipped mills with humidifiers. --- Hadley Thread Co. added speeders, March. New building at factory of William Skinner & Sons, silks, completed .-Alpaca Co. shut down portion of weaving department and reduced running time.-American Pad & Paper Co. moved into new building: of brick, 60 x 125 feet. — Deane Steam Pump Co. reduced running time. - George C. Gill patented invention for promoting the efficiency of dryers attached to paper machines. --- C. H. Baush & Sons. machinery, succeeded by Baush & Harris; capital stock \$75,000. - Albion Paper Co., after shutdown, allowed to run limited time. - Keating Wheel Co., bicycles, ran nights. April. Nonotuck Paper Co. made plans for addition to mill No. 2. -- No. 1 mill of Whiting Paper Co. shut down for improvements. --- Newcomb Filter Co. organized to manufacture filters, the invention of C. L. Newcomb; capital stock \$5,000. - Parson & Green, paper, removed from New York to this city. --- Massasoit Paper Manufacturing Co. notified employés of proposed reduction in wages. --- Holyoke Warp Co., cottons, increased floor space and added machinery. - Plant of Holyoke Hydrant & Iron Co. purchased by parties in Northampton, who decided to remove it to that place. --- Charles Harvey Heywood, paper manufacturer, died, aged 57 years. May. Portion of government contract for furnishing envelopes awarded to Holyoke Envelope Co. - Parsons Paper Co. No. 1 and Parsons Paper Co. No. 2 combined as Parsons Paper Co: capital stock \$360,000. --- Crocker Paper Co. conducted successful experiments in new sort of paper. - Levi D. Van Valkenburg granted patent on lead pencil and pen-holder attachment. --- Massasoit Paper Manufacturing Co. shut down finishing room temporarily and reduced wages. - Plans made by Baush & Harris for new factory to be erected in Springfield. - Arrangements made for the removal of Keating Wheel Co. to Middletown, Conn. - Farr Alpaca Co. shut down and resumed on short time. Merrick Thread Co. reduced working hours; 1,300 employés affected. - Orrick H. Greenleaf, president of Holyoke Paper Co., died in Springfield, aged 73 years. Farr Alpaca Co. shut down one week for repairs. --- Merrick Thread Co. ran on reduced time. - Whiting Paper Co. began giving employés half-holiday on Saturday. July. Holyoke Water Power Co. began operating water gas plant. --- Whiting Paper Co., Nonotuck Paper Co., George B. Dickinson Paper Co., Holyoke Paper Co., and Beebe & Holbrook Paper Co. made repairs and improvements. --- Holyoke Hydrant & Iron Works removed to Northampton. - Parsons Paper Co. shut down for repairs. - Riverside Paper Co. shut down for repairs during three weeks and resumed. -Andrew Buchanan of Buchanan, Bolt, & Co. died, aged 45 years. - Messengers employed by Western Union Telegraph Co. struck for more pay. August. Crocker Manufacturing Co., paper, completed new mill and started up that portion of plant. Riverside Paper Co. added new boilers. --- Whiting Paper Co. shut down temporarily for repairs. - Farr Alpaca Co. shut down on account of lack of orders. Germania Mills, woollens, ran on short time. — Lyman Mills, Nos. 2, 3, and 4, shut down on account of dull market; 700 employés affected; in September resumed. September. Morris W. Moore granted patent on fountain pen. - Farr Alpaca Co. resumed operations on reduced time. - Riverside Paper Co. started up No. 1 mill. -Connecticut River Manufacturing Co., lumber, resumed operations. - Improvements completed at mill of George R. Dickinson Paper Co. and plant started up. -Blank Book Co. reduced working time. October. William Skinner Manufacturing Co., silks, resumed operations. --- Merrick Thread Co. started up mills Nos. 1, 2, and 8 on reduced time. — Albion Paper Co. re-organized; capital stock \$550,000. — Seymour Cutlery Co. re-organized; capital stock \$25,000. — Strike occurred among steam fitters. November. Patent granted Alvan E. Olney on chimney mechanism. - Farr Alpaca Co.

www.libtool.com.cn

increased running time. — Alterations and repairs made at plant of Albion Paper Co. December. Patent granted Dennis J. Landers on drainer floor and tile. — Nonotuck Paper Co. added oscillating machines. — Merrick Thread Co. increased running time.

Hopedale. In January, Hopedale Machine Co. ran overtime to fill orders. --- Hopedale Elastic Goods Co. reduced working hours. February. Dutcher Temple Co. shipped March. E. S. Stimpson invented loom shuttle and J. H. goods to Shanghai, China. Northrup invented loom thread-parter. May. Hopedale Machine Co. shipped looms to Russia. — Charles E. Nutting granted patent on self-threading loom shuttle: assigned to G. Draner & Sons June. George Draper & Sons, machinery, built addition to office buildings. July. Charles H. Colburn, retired manufacturer, died, aged 60 years. August. Hopedale Machine Co. reduced running time; in October, received order from November. Patent granted to Charles A. Lapworth on lamp shade or reflector Mexico. December. Patent granted to William F. Draper and J. H. Northrup on loom. holder.

Hopkinton. In January, cutters at factory of Woodville Shoe Co. commenced work. March. Woodville Shoe Co. incorporated; capital stock \$25,000. May. A. Coburn Boot & Shoe Co. incorporated; capital stock \$75,000. August. Crooks, Root, & Co., shoes, shut down for repairs. — Woodville Shoe Co. shut down for stock taking.

Hudson. In January, Hudson Worsted Co., new firm, started up plant on full time. March. L. T. Jetts, shoes, started up on ten hour time. — Apsley Rubber Co. resumed work. — George Houghton, retired shoe manufacturer, died. April. Thos. Taylor & Sons, elastic webs, ran nights. — Bradley & Saywood, shoes, set up new engine. July. Luman T. Jetts, shoe manufacturer, died, aged 66 years. August. Apsley Rubber Co. and Hudson Worsted Co. resumed operations after idleness of several weeks. — C. M. Brett, shoes, added new lasting machine; in October, placed new boiler. October. Stowe, Bills, & Hawley, shoes, dissolved; succeeded by Stowe, Bills, & Hawley Co. November. Patent granted Sidney W. Sampson on valve.

Huntington. In February, Highland Mills, woollens, shut down indefinitely. August. Chester Paper Co. installed electric lights.

Hyde Park. In January, S. Klous & Co., gossamer rubber clothing, reduced wages.

John T. Robinson & Co., paper boxes, damaged by fire. February. Norfolk Rubber Co. leased former starch factory and set up machinery to manufacture rubber clothing. March. Robert Bleakle & Co., woollens, reduced running time. April. Shoddy mill of T. H. Gray & Co. damaged by fire. May. Tileston & Hollingsworth Co., paper, began erection of new mill. — Wilton Mills, woollens, damaged by fire. June. George W. Rice of Rice & Hutchins, shoes, died, aged 42 years. — Buildings of American Tool & Machine Co. damaged by fire. July. B. B. & R. Knight, cottons, built addition of brick, one story, and made improvements; reduced to two-thirds time. August. Robert Bleakle & Co., woollens, resumed full time. September. E. C. Morris Safe Co. reduced force; in December, shut down indefinitely. November. Patent granted Jas. A. Tilden on fluid atomizer.

Ipswich. In February, isinglass factory of Norwood & Son shut down after annual run. — F. L. Cartledge granted patent on sinker holder for knitting machines. April. Ipswich Mills, hostery, added humidifying machines. — Paper box factory of James W. Bond destroyed by fire. May. Thomas G. Plant Co., shoes, Lynn, leased factory to establish branch of business in this place. June. Farley & Daniels, shoes, started up. — Additional story built at Thomas G. Plant factory and business started up. August. Remaining portion of business of Thomas G. Plant Co. removed from Lynn to this place; sympathetic strike occurred among cutters and lasters. November. Ipswich Mills, hosiery, increased to full time; in December, ran nights. December. Thomas G. Plant Co., shoes, removed to Roxbury.

LAWRENCE. In January, accident to machinery caused temporary shutdown at Pacific Mills.—Stock subscribed and plant secured for manufacture of pneumatic bicycle saddles.—Weaving department of Washington Mills Co. ran overtime.—W. R. Hamilton & Son, wool combers, added machinery.—Emmons Loom Harness Co. purchased old box factory and demolished it; plans made for brick building, 60 x 140 feet, three stories, to be erected on site.—New plant of Lawrence Lumber Co. completed; main building, 70 x 294 feet, two stories.—Thomas Clegg, retired manufacturer, died, aged 76 years.—Pacific Mills damaged by fire. February. Plans made for new en-

gine and boiler house at factory of George E. Kunhardt, woollens. — Washington Mills Co. added four new water wheels, aggregating 1,100 horse power. — Brown & Ackroyd, woollens, leased additional quarters and moved weaving, burling, and dressing depart-March. Arlington Mills reduced running time because of over-production; plans made for erection of new building, 110 x 670 feet. - Following corporations damaged by flood and shut down temporarily: Everett Mills, Pacific Mills, and Washington Mills. - Warren E. Rice Co., bookbinders, damaged by fire. April. Caleb T. Briggs retired from Briggs & Allyn Manufacturing Co., sashes, doors, and blinds; interest sold to George W. Copp of Methuen. - Pacific Mills began erection of new storehouse, 100 x 225 feet, seven stories. — Lawrence Duck Co., cottons, shut down temporarily. Everett Mills, cottons, shut down for stock taking and resumed; later, reduced running time to 40 hours. - Washington Mills Co. shut down for one week and resumed on short time. — Pemberton Co., cottons, reduced running time to 40 hours. May. Arlington Mills awarded contract for new mill, 105 x 600 feet, five stories. — Washington Mills Co. added new machinery, --- Charles Schrebler granted patent on bagging machine and Walter B. Fowler on draft regulator for chimneys. --- Work begun on new factory of Emmons Loom Harness Co. - Artemus W. Stearns, president of Weight Manufacturing Co., woollens, died, aged 80 years. June. Excavations for new building at Arlington Mills begun. — Merrimac Paper Co. added new engine and boiler. — Pemberton Co.. cottons, announced two months' shutdown for repairs and on account of dull trade .-Weaving and finishing departments of Washington Mills, woollens, resumed full time: later, plant shut down; in July, resumed on reduced time. July. E. Frank Lewis. wool scourer, made plans for addition to storehouse, of brick, two stories, --- Pacific Mills shut down for two weeks and resumed on full time; new machinery erected .-Pemberton Co., cottons, shut down for two months, --- Everett Mills, cottons, shut down for two months; 1,200 operatives affected. August. Washington Mills Co. resumed operations on full time. - George E. Kunhardt, woollens, resumed operations after shutdown of one month for repairs. - Everett Mills, cottons, made changes in machinery. - Pacific Mills installed new feeds. --- Washington Mills Co. placed new boilers. -Stanley Manufacturing Co., sewing machines, reduced running time. --- Print works department of Pacific Mills shut down; 2.500 operatives affected. - Arlington Mills shut down for five weeks; 3,000 operatives affected. September. Atlantic Cotton Mills added two new engines. - Arlington Mills started up portion of plant. - Pacific Mills resumed operations. — Russell Paper Co. shut down for repairs and resumed. — Washington Mills Co. shut down few days for repairs. -- Lawrence Line Co. discontinued manufacturing. October. Everett Mills, cottons, resumed operations. - Remaining portion of Arlington Mills resumed operations; additional land purchased .-Plant of Washington Mills Co, woollens, damaged by fire. November. Stanley Manufacturing Co, sewing machines, increased force. - Patent granted J. E. Glidden, administrator for Charles W. Glidden, on heel nailing machine. - Washington Mills Co. resumed operations after shutdown occasioned by fire. - Arlington Mills set up new boiler of 1,500 horse power. — Pemberton Co., cottons, completed repairs and started up. --- Charles C. Holt, pump manufacturer, died, aged 65 years. December. Pacific Mills made improvements in dyeing department. — Samuel Smith, machinist, began erection of factory building, 50 x 64 feet, four stories. --- Work of rebuilding dyehouse destroyed by fire at plant of Washington Mills Co. begun. --- Atlantic Cotton Mills ran full on orders from Japan.

Lee. In January, arrangements made for starting up Morley Paper Mill. ary. Smith Paper Co. refitted Valley Mill for manufacture of tissue paper. - Thistle Wire Co. added two wire looms. --- Hurlbut Paper Manufacturing Co. made repairs in machine room. March. Paper mills shut down temporarily on account of high water, April. John Dowd, manufacturer of paper machinery, died, aged 71 years. May. Smith Paper Co. started up Valley Mill on half time. - Benton Bros., paper, shut down temporarily for repairs. June. Smith Paper Co. refitted Eagle and Columbia Mills for manufacture of tissue paper. July. Geo. K. Baird & Bro. incorporated as G. K. Baird Paper Co. --- Smith Paper Co. shut down Eagle Mill for several days. --- Gray & Sons, lumber, reduced force. August. G. K. Baird Paper Co. shut down for repairs. tember. Eaton, Dikeman, & Co., paper, shut down for repairs. — Smith Paper Co. made improvements at Eagle and Valley Mills. October. Hurlbut Paper Manufacturing Co. shut down for repairs and Smith Paper Co. shut down temporarily on account of low November. Smith Paper Co. re-adjusted time at Valley Mill. --- Hurlbut Paper Manufacturing Co. resumed operations. — James F. Benton, paper manufacturer, died, aged 57 years.

Leicester. In January, Bisco & Denny, machinery, increased running time.

February. J. J. Murdock, card clothing, increased running time.——Newton Darling, satinets, suspended operations temporarily; resumed in March after shutdown of two weeks. June. Woollen mills of Newton Darling, Eli Collier, George Mann & Bro., and Darling, Thayer, & Co. shut down.

August. Leather department of American Card Clothing Co. shut down indefinitely.

September. Woollen mill of E. A. Butler damaged

by fire; shut down in consequence; in October, resumed.

Lenox. In June, P. J. Honeyman began manufacture of golf clubs and balls.

www.libtool.com.cn

Leominster. In January. Leominster Horn & Supply Co. started up; to manufacture chemicals for dyeing, etc., from horn waste. - George A. Gane, shirts, reduced running time. - New factory of Richardson Piano Case Co. completed. George W. Wheelwright Paper Co. added new paper making machine. Manufacturing Co., leather, reduced working force. - Plant of W. S. Reed Toy Co. destroyed by fire. March. George W. Wheelwright Paper Co. added new engine. May. E. B. Kingman & Co., combs and jewelry, reduced force. June. Danforth Chemical Co. organized; to manufacture powder poisonous to insect life. July, Leominster Shirt Co. removed business from Provincetown and began erection of addition, 35 x 85 feet, two stories. --- Geo. A. Gane, shirts, resumed operations on full time after shutdown. - E. M. Rockwell, woollens, started up on full time. - Leominster Worsted Co. ran on reduced time. - F. G. Smith Piano Case Co. reduced wages. August. F. A. Whitney Carriage Co. installed system of electric time registering. - B. F. Wood & Co., grain, installed machine for cleaning grain. --- Furniture factory of N. C. Boutelle damaged by fire. September. Merriam, Hall, & Co., furniture, ran on short time. Leominster Worsted Co. increased running time.

LOWELL. In January, Tremont & Suffolk Mills, cottons, petitioned for permission to increase capital stock to \$3,000,000 and to do business outside of State; granted in February. - Faulkner Mills, woollens, ran on short time on account of lack of orders; in February, shut down. ---- Safety Seamless Pocket Co. removed from Plymouth to this place. - Lowell Hosiery Co., Tremont & Suffolk Mills, cottons, and Merrimack Manufacturing Co. added new machinery. — Lowell Weaving Co. organized; capital stock \$30,000. — Hamilton Manufacturing Co. damaged by fire. February. U. S. Bunting Co. shut down portion of weaving department for repairs. --Tremont & Suffolk Mills added new mules. --- Bubber goods business of Haywood Bros. submerged into stock company under name of Lowell Rubber Co. --- Lowell Hosiery Co. added automatic knitting frames and revolving flat cards. --- Jute card mill of Samuel E. & T. Stott damaged by fire. March. James H. Dugdale purchased Standard Worsted Mill. --- Supreme Court decided that proposed textile school could be established in this place under provision of legislative act. - Lawrence Manufacturing Co., cottons, added four 54inch water-wheels; decided to confine product to hosiery. -- Lowell Manufacturing Co., carpets, made plans for new dyehouse. --- Red Seal Manufacturing Co., toilet articles, secured quarters for removal of business from Rockland, Me., to this place. --- Plans made for erection of new factory for Sturtevant & Galer, woodworkers: of wood, 50 x 150 feet, three stories. --- Merrimack Manufacturing Co., cottons, resumed work after week's shutdown. --- Lowell Manufacturing Co., carpets, began to run Brussels department alternate weeks. ---- All the mills in the city damaged by flood which occasioned temporary shutdowns; from 15,000 to 20,000 persons affected. - John S. Jacques, shuttle manufacturer, died, aged 83 years. April. Shaw Stocking Co. added new looms. --- Myron Bros., shoes, made plans for erection of new factory building, 50 x 80 feet, two stories. - U. S. Bunting Co. and Walsh Woollen Mills reduced running time to three days per week. - Lawrence Manufacturing Co., cottons, in conformity with decision to discontinue the manufacture of cloth, shut down No. 5 mill permanently; between 1,500 and 2,000 operatives affected. - Box factory of James A. Thompson destroyed by fire. May. Merrimack Manufacturing Co., cottons, shut down temporarily. --- Steam pipe in weaving room of Appleton Co., cottons, fell, causing temporary shutdown; weavers on fancy goods struck for increase in pay; resumed work later. June. Bourne Bleachery organized to bleach, dye, and finish yarns and fabrics; capital stock \$100,000. - Boott Cotton Mills added new picking machinery. --- Appleton Co., cottons, received order for 2,000 bales of goods for China. - Quarters secured for establishment of public textile school. — Lowell Machine Shop made repairs on office buildings. - Lowell Hosiery Co. suspended operations for one week. - Merrimack Manufacturing Co., cottons, shut down temporarily for repairs and stock taking. - Pickering

Knitting Co. and dyehouse of Middlesex Co., woollens, shut down, --- Mule spinners at Boott Cotton Mills struck; settled. July. Massachusetts Mohair Plush Co. increased equipment of plant. --- Mill No. 5 of Lawrence Manufacturing Co., cottons, purchased by Tremont & Suffolk Mills Co. - Lowell Manufacturing Co., carpets, resumed full time. --- Card room of Tremont & Suffolk Mills Co. ran nights. --United States Bunting Co., woollens, ran on three-fourths time, ---- Atherton Machine Co. shut down for two weeks, ---- Middlesex Co., woollens, shut down indefinitely: 1.000 operatives affected. --- Hamilton Manufacturing Co., cottons, shut down for two weeks, -W. H. Carter, woollens, shut down. - Union Iron Foundry damaged by fire. August. Hamilton Manufacturing Co., cottons, resumed operations. --- Lowell Manufacturing Co., carpets, shut down for one week; repairs made and operations resumed. - Merrimack Manufacturing Co., cottons, shut down for three weeks; repairs made and operations resumed. - Lowell Machine Shop ran on reduced time. - Lowell Hoslery Co. and Shaw Stocking Co. shut down. -- Lowell Weaving Co., cottons, shut down for four weeks. --- No. 2 mill of Belvidere Woollen Manufacturing Co. shut down for four weeks. - Stirling Mills, woollens, shut down. September. Whitall Manufacturing Co. incorporated; to manufacture cotton underwear. --- Consumers Brewing Co. began erection of addition, 50 x 54 feet, three stories. --- Dyeing department of Lowell Hosiery Co. started up. — Middlesex Co., woollens, started up portion of plant.
— Tremont & Suffolk Mills Co., cottons, placed new picking machinery in No. 5 mill acquired from Lawrence Manufacturing Co .- Lowell Manufacturing Co., carpets, shut down alternate weeks. --- Plant of Tremont & Suffolk Mills Co. shut down temporarily on account of low water. --- Hamilton Manufacturing Co., cottons, shut down portion of plant. October. Charles Littlefield invented attachment which converts an ordinary loom into a continuous running loom by removing the empty shuttle and replacing it by one already filled without abating the speed of the machine. --- A. P. Hooker and others started new mill for weaving novelties in woollens. - W. H. Parker & Sons, bobbins, received order from China. — Lowell Hosiery Co. started up in full. — Lamson Consolidated Store Service Co. ran overtime. - Thomas C. Entwistle, cotton machinery, increased capacity. — Haworth & Watson, cop tubes, moved into new factory. -Lowell Machine Shop ran on half time. - Lowell Manufacturing Co., carpets, ran alternate weeks. --- Kitson Machine Co. shut down indefinitely. November. Tremont & Suffolk Mills Co. started up mill purchased from Lawrence Manufacturing Co.: 1.000 persons employed. - Patent granted to Edward W. Thomas on fire extinguishing system. - Middlesex Co., woollens, made repairs. - Merrimack Manufacturing Co., cottons, shut down for stock taking. --- Cotton in yard at Massachusetts Cotton Mills destroyed by fire, December. Kitson Machine Co. increased force. - Middlesex Co., woollens, reduced running time. - William Cleworth, reed manufacturer, died, aged 75

Ludlow. In July, storehouse of Ludlow Manufacturing Co., jute, damaged by fire; in September, made improvements in fire protection system and made plans for erection of eight new stock houses, 40×150 feet; in October, bagging department shut down; 300 operatives affected.

LYNN. In January, cut sole business of W. S. Dickson purchased by Keck, Mosser. & Co. of Boston. -- S. B. Breed and A. W. Clapp formed partnership and established manufacture of cut soles. - O. L. Upham established manufacture of cut soles. - C. S. Sweetser, shoes, retired from business; plant sold at auction. — Addition completed at shoe factory of D. A. Donovan & Co. - New factory of J. B. Renton, heels, completed. - Frank E. Holt invented machine for counting ballots. - D. J. Donohue, morocco, successor to Donohue & White, ran overtime. - Dickinson & Leadbetter, slippers, dissolved; succeeded by Joseph Dickinson. - Preble & Worth, shoes, dissolved; succeeded by E. P. Worth. — Bailey, Curtis, & Co., shoes, succeeded by Bailey & Curtis. -Following shoe firms moved into new quarters: Haskell, Rich, & Co., Seymour & Jackson, and E. P. Worth. - John B. Alley, retired shoe manufacturer, died, aged 79 years. - Shoe factory of Mark J. Worthley damaged by fire. - Edge-makers employed by Luddy & Currier, shoes, struck for increase. — Cutters at factory of West Lynn Shoe Co. struck because of cutdown; settled at former rate. February. Keck, Mosser, & Co., leather, refitted Dickson property and leased additional quarters. --- James T. Lennox became special partner in shoe business of Joseph Dickinson. — Eckhardt & Ford, shoes, increased space. - Carlton, Tuttle, & Co. and F. L. Spinney & Co., shoes, dissolved. - John M. Noyes Shoe Co. made arrangements for removal to Barre. -William F. Abbott of Abbott Slipper Co., died, aged 60 years; business continued by part-

– N. F. Tucker & Co., shoes, discharged lasters; lockout declared ner under same style .by Lasters' Union. March. Durland & Litch, counters, dissolved; name changed to Durland & Co. - James J. Donohue admitted as partner in morocco business of D. J. Donohue; name changed to Donohue Bros. --- W. S. Boyce & Co. established manufacture of shoes. - H. F. McCarthy & Co. and Jas. J. Grover's Sons, shoes, moved into new quarters. - N. F. Tucker & Co. shoes, removed to Middleton.-Thomas W. Gardiner, late of Porter & Gardiner, Worcester, leased factory for manufacture of lasts. --- George E. Bartlett, retired shoe manufacturer, died, aged 76 years. -Cutters at shoe factory of L. J. Richards & Co. and lasters at shoe factory of Joseph Dickinson struck because of wage difficulties. April. Solid Shoe Co. resumed operations after shutdown for stock taking. - John B. Renton moved into new factory. -- Nicolas Weber & Son, morocco, succeeded by Weber Leather Co.; incorporated; capital stock \$5,000. --- Paul, Greenwood, & Jones, shoes, dissolved; plant purchased by Chris. C. Blaisdell. — Leonard Shoe Co. put in lasting machines and discharged lasters and sole layers. — John F. O'Hara, formerly of J. F. O'Hara, & Co., shoes. died in Worcester, aged 31 years. --- Lockout of lasters occurred at factory of National Shoe Co. - Teamsters in employ of Reed & Costello, coal dealers, struck because of dissatisfaction with wages. May. L. J. Richard & Co., shoes, dissolved; business continued by Mr. Richard under same style. - Nourse & Oliver, shoe patterns, dissolved. - Following new firms established: Imperial Stain Co., East Lynn Shoe Co., Morning Star Shoe Co., Century Shoe Co., Alex Haines, shoes, and Perfection Shoe Co.-Patents granted as follows: David T. Knox, on machine for cutting block soles; Zotique Beaudry, on burnishing tool for boot and shoe heels: Walter S. Moody, on alternating current generator; assigned to General Electric Co. - Factory of E. C. Blake, lasts, damaged by fire. - Lasters at shoe factory of D. J. Richard struck. June. West Lynn Shoe Co. built additions to factory, 25 x 40 and 15 x 20 feet. tus E. Winkley granted patent on relasting machine. --- Murray Shoe Co. and Howard & Daley established manufacture of shoes. — Abbott Slipper Co., succeeded by Lynn Slipper Co.; incorporated; capital stock \$5,000. - Century Shoe Co. succeeded by Warwick Shoe Co. - Hill & Green, shoes, removed from Pittsfield, N. H., to this place. - P. H. Nourse & Co., counters, dissolved; business continued by P. H. Nourse; moved into new quarters. — S. J. Hollis & Co., shoes, dissolved. — J. M. Noyes Shoe Co. removed to Barre. — Durgin & Tuttle, shoes, shut down. — Shirley & Gibson, shoes, discontinued business. -- V. K. & A. H. Jones reduced force. -- Edward T. Bubier, retired shoe manufacturer, died, aged 71 years. - Franklin Foss, shoe manufacturer, died, aged 69 years. July. Charles H. Walden admitted to firm of Hoag & Heath; style changed to Hoag, Heath, & Co. - Melanson & Roop, shoes, dissolved; succeeded by Melanson & Currier. — Charles F. Stackpole granted patent on sole-edge burnishing machine --- Eugene H. Taylor granted patent on beating-out machine. --- William H. Nourse, formerly of P. H. Nourse & Co., shoe findings, established manufacture of counters, stiffenings, etc. - Chas. E. Blake & Co., shoes, added new boiler, - J. F. Swain & Co., shoes, consolidated with Winsted (Conn.) Shoe Co. and announced intended removal to that place. - C. F. Fox & Co., shoes, advertised stock, machinery, etc., for sale. - Williams, Clark, & Co., shoes, and Brophy Bros. Shoe Co. shut down for repairs and resumed. -- Berry Shoe Co. discontinued manufacturing. -- Preble Bros., shoes, closed factory in this place. - Long & Gloyd, shoes, suspended operations temporarily. Thomas G. Plant & Co., shoes, discharged lasters; strike inaugurated; firm began erection of factory in Boston. - Albert T. Goodwin, retired last manufacturer, died, aged 84 years. -- Last factory of E. C. Blake and shoe factory of Chas. F. Fox & Co. August. E. H. Taylor invented machine for making heels. — Lynn damaged by fire. Heel Co. increased space. - Chas. F. Fox & Co., shoes, discontinued manufacturing. Strike occurred at shoe factory of Thomas G. Plant Co., followed by removal of firm to September. Seth D. Tripp granted patent on edge-finishing machine. -Mrs. C. H. King Co., shoes, changed style to King Shoe Co. — J. P. Griffin & Co. purchased business of W. F. Sheehan, lasts .--- Arrangements made for the removal of Brush Electric Co. of Cleveland, Ohio, to this place; to occupy plant of General Electric Co. - M. C. Mason & Co., shoes, sold out. - J. Frank Harris, shoes, ran with reduced force. - Factory of Faunce & Spinney, shoes, damaged by fire. October. John R. McManus and Thomas F. Hart received patent on machine for manufacturing shoe stiffenings. - Joseph Gaunt & Co., shoes, increased capacity. - Atkins, Hoyt, & Co., cut soles, established manufacture of new line. --- William T. Ash, shoes, decided to remove plant to Brooklyn, N. Y. - Legro & Spaulding, shoes, decided to remove to Maine. - G. Willis Hanson, cut soles, and Lynn Last Manufacturing Co. moved into new quarters. - V. K. & A. H. Jones and D. J. Richard, shoes, increased force. - All

shoe stain and ink manufacturers decided to close at noon on Saturday throughout the year. --- Strike occurred among lasters at shoe factory of Joseph Dickinson. November. Brush Electric Co. of Cleveland, Ohio, removed to this place. -- Patent granted to William D. Huntington on agricultural hand tool. - John H. Parke, shoes, removed from Claremont, N. H., to this place. - Carr Bros., heels, removed from Woburn to this place. - Vose Edge Finishing Machine Co. established manufacture of machines. -D. A. Donovan & Co., shoes, added lasting machines. — Hudson Bros., heels, dissolved. New York Shoe Manufacturing Co. discontinued manufacturing. — East Lynn Shoe Co. dissolved. -- E. H. Stowell of E. H. Stowell & Co., morocco, died. December. Patent granted to John B. Emery on sole trimming machine and to Eugene H. Taylor on mechanical movement. - Following firms established manufacture of shoes: Thomas F. Corcoran, Cross & Tucker, and Alley & Austin. - John F. Flynn secured quarters and re-established manufacture of shoes. --- Charles F. Fox & Co., shoes, resumed operations. - Brophy Bros. Shoe Co. ran nights, - The Crossman Co., heels, dissolved by death of Isaiah Crossman; business continued by M. S. Nichols. - J. A. Cook, slippers, shut down for stock taking. - Following shoe manufacturing firms reduced wages: C. H. Aborn & Co., Baker & Creighton, D. A. Donovan & Co., Durgin & Tuttle, Harney Bros., P. J. Harney & Co., Hoag & Heath, S. J. Hollis & Co., Luther S. Johnson & Co., Luddy & Currier, James Phelan & Sons, William Porter & Son, Shillaber & Co., A. F. Smith, C. W. Varney & Co., Welch & Landregan, and Williams, Clark, & Co. --- Strike instituted against Thomas G. Plant Co., shoes, declared off .-Factory of P. P. Sherry, shoes, damaged by fire.

MALDEN. In January, Frank McDonald granted patent on heel spring. February. Boston Rubber Shoe Co. resumed work on three-quarters time after shutdown of two weeks on account of dull trade. March. Middlesex Last Co. damaged by fire. — Plant of H. H. Richards Cycling Co. destroyed by fire. April. Mechanical Manufacturing Co. purchased plant for establishment of new industry. — Factories of Boston Rubber Shoe Co. shut down for four weeks; about 2,500 operatives affected; resumed in May. June. Strike of plumbers occurred; settled. October. Boston Rubber Shoe Co. resumed operations. December. Octavius N. Coburn, inventor of improvement in rubber shoes, died, aged 72 years.

Marblehead. In March, box factory of Otis Roberts damaged by fire. July. Clark & McIntosh, shoes, dissolved. — John F. Harris, retired shoe manufacturer, died, aged 70 years. November. George E. Coates established manufacture of shoes. December. Nathaniel Sweet and Edgar M. Savoy formed partnership for manufacture of shoes. — Arrangements made for resuming operations in shoe factory of Peach Bros. after idleness of one year.

MARLBOROUGH. In January, J. F. Desmond & Co., shoes, resumed operations. February. H. O. Russell & Co., shoes, ran on reduced time. — Middlesex Shoe Factory resumed ten-hour schedule. March. S. H. Howe Shoe Co. started up portion of plant on ten-hour time. - J. A. Frye, shoes, increased running time; later in month strike occurred among heel cutters. April. Decision of State Board of Arbitration in case of Rice & Hutchins, shoes, and S. H. Howe Shoe Co. showed average reduction. - M. J. McCarthy set up machinery in factory formerly occupied by Elmer Loring. - William Dadman, retired shoe manufacturer, died, aged 79 years; Mr. Dadman was a pioneer manufacturer and builder of factory occupied by S. H. Howe Shoe Co. May. Wood & Willard, machinery, dissolved; business continued by Herbert J. Willard under style of The Wood-Willard Elevator & Machine Co. June. Employés of Rice & Hutchins, shoes, struck; settled in July and operations resumed. August. DeWolf & Bagwell, shoes, announced intention of removing to Conway. September. Frank & Duston, paper boxes, began manufacture of shoes. November. Patent granted to Joseph E. Proctor on machine for attaching uppers to soles of boots or shoes .--- S. H. Howe Shoe Co, started up "Diamond O" factory after shutdown of one year. - John A. Frye, shoes, increased space. December. Shipments of shoes during 1896 numbered 315,884 cases; estimating at 40 pairs to a case, number of pairs aggregated 12,635,360.

Maymard. In April, Assabet Manufacturing Co., woollens, reduced running time to four days per week; 1,100 operatives affected; in November, started up every department on 50 hours time after running irregularly; in December, reduced time.

MEDFORD. In June, stock company formed to manufacture Boston Perfection Roller Screen. November. Following patents granted: To Herbert H. McKerrow, on

www.libtool.com.cn

apparatus for bleaching; to William Scott, on tank supply valve; to John Oldfield, on sand depositing apparatus.

Medway. In January, woollen mill of Cole, Senior, & Co., started up. March. M. A. Smith, shoes, reduced force. May. Cole, Senior, & Co., woollens, ran overtime; in June, added new engine. July. M. A. Smith, shoes, added new machinery. — Hirsh & Park, straw goods, increased force. — Cole, Senior, & Co., woollens, added machinery; shut down for repairs on dam. — Chase, Merritt, & Co., shoes, shut down indefinitely; 200 operatives affected. August. Work resumed at factory of New England Awl and Needle Co. after three weeks' vacation. — Hirsh & Park, straw goods, increased force. — Chase, Merritt, & Co., shoes, removed to Mechanic Falls, Maine. — Cole, Senior, & Co., woollens, shut down for repairs and resumed; in September, repairs made on engine; in December, ran on short time. December. A. M. Smith, shoes, shut down for two weeks.

Melrose. In July, Italian laborers employed on sewer struck. November. Patent granted to Charles H. Little on cash register.

Merrimae. In June, Drew & Highley began manufacture of patent bicycle trotting sulkies. July. H. G. & H. W. Stevens, Samuel C. Pease & Son, J. B. Judkins & Sons Co., J. A. Lancaster & Co., and other carriage manufacturing firms shut down for vacation during two or three weeks and resumed. December. Carriage factory of Edward C. Hopkins destroyed by fire.

Methuen. In March, Frank A. Wardwell, inventor of extension hat brim, secured quarters at mill of Knitted Fabrics Co. and began manufacture. — Picker room at mills of Methuen Co., cottons, damaged by fire. April. Knitted Fabrics Co. ran nights temporarily. — Methuen Co., cottons, shut down one week in order to curtail production. May. Swain Manufacturing Co., knit goods, increased space and added new engine and boller. — Methuen Co., cottons, added humidifiers; in July, shut down for repairs. July. Knitted Fabrics Co. resumed operations after shutdown. August. Methuen Co., cottons, made repairs and improvements. — Knitted Fabrics Co. shut down; in September, resumed in part. — Cotober. Methuen Co., cottons, started up in part. — Knitted Fabrics Co. ran nights; in November, resumed regular hours. December. Methuen Co., cottons, ran overtime.

Middleborough. In May, work begun on new shoe factory for Leonard & Shaw. June. Business started up at shoe factory of Keith & Pratt. October. Electric lighting plant installed at new shoe factory of Leonard & Shaw. November. Leonard & Barrows, shoes, ran nights.

Middlefield. In May, property of Church Mills Knitting Co. sold to C. Herrick of West Springfield.

Middleton. In March, N. F. Tucker & Co., shoes, removed from Lynn to this place. May. Temporary shutdown occurred at mills of Middleton Paper Co. June. Factory of N. F. Tucker & Co., shoes, destroyed by fire. August. Middleton Paper Co., wall paper, shut down printing department for repairs. October. Factory formerly occupied by A. P. Tyler & Co., shoes, fitted up for manufacture of incandescent lamps by Merritt Electric Co. of Lynn. — Printers at mills of Middleton Paper Co. struck because of reduced wage schedule; settled. December. Merritt Electric Co. began operations.

Milford. In January, Eastman & Hobart, boxes, dissolved; business continued by Hobart. February. Colburn, Fuller, & Co., shoes, introduced cheaper line of work and referred matter of prices to State Board of Arbitration; in April, settled satisfactorily. April. E. F. Pendexter granted patent on combined door lock and skid. — Machinery of Milford Moulded Counter Co. sold at auction. — Lasters and fitters at factory of Milford Shoe Co. struck because of dissatisfaction with price list; settled. May. Factory of Milford Moulded Counter Co. purchased by William F., George A., and Eben S. Draper of Hopedale. July. E. E. Goff retired from firm of Goff & Welch, proprietors of Franklin Iron Foundry. — Charles H. Colburn of firm of Colburn, Fuller, & Co., shoes, died in Hopedale, aged 60 years. August. William Lapworth & Sone satablished manufacture of elastic fabric. — Colburn, Fuller, & Co., shoes, shut down on account of labor troubles; later, resumed in part; in September, shut down indefinitely. October.

Clapp, Huckins, & Temple, shoes, ran overtime. —— Newhall & Buckley, shoes, damaged by fire. December. Colburn, Fuller, & Co., shoes, reorganized and removed business to Derry, N. H. —— C. A. Carpenter and Fred Koch formed partnership and secured quarters for the manufacture of cigars. —— Ewing & Howard established the manufacture of shoes. —— Greene Bros., heels, ran on three-quarters time.

Millbury. In January. Edwin Hoyle & Son, woollens, decided to build addition, 50 x 50 feet, three stories. --- Stock of Crane & Waters Co., knit goods, sold at auction; in February, plant sold in same manner. - John Rhodes Warp Co. reduced to three-quarters time. - Millbury Machine Co. resumed work at repair shop of Millbury Cotton Mills. F. A. Lapham, woollens, shut down indefinitely. --- Sash and blind factory of C. D. Morse Manufacturing Co. destroyed by fire; to be rebuilt. March. R. F. Crane, wool scourer and shoddles, leased additional quarters. - Millbury Cotton Mills reduced wages. --- Whitney, MacDuff, & Co., thread spinners, increased to full time. April. Cordis Mills, cottons, erected revolving flat cards. - Stock subscribed for establishment of drop forging plant. - Plans made for improvements in water power plant at Millbury Cotton Mills. - New corporation, to be known as Portsmouth Mills Co., formed to operate the Crane and Waters hosiery mill; plant started up. May. Work begun on foundation of new factory of C. D. Morse Manufacturing Co., sashes and blinds .-Woollen Mill operated by Edwin Hoyle, shut down for two weeks to allow changes to be made in product; contract awarded for new addition, --- Shoddy and grist mill of John S. Rich destroyed by fire; work of rebuilding begun in June. June. Cordis Mills, cottons, added new machinery. - Foundation for addition at Ramshorn Woollen Mill completed; building to be of brick, 48 x 49 feet, two stories. July. Millbury Cotton Mills shut down for three weeks and resumed. - John Rhodes Warp Co. shut down. -C. T. Aldrich, woollens, ran on reduced time; in August, shut down temporarily for re-August, Portsmouth Mills Co. incorporated; capital stock \$40,000. tract awarded for new buildings for C. D. Morse Manufacturing Co.; of brick; main building, 126 x 184 feet; engine and boiler house, 40 x 60 feet. --- Millbury Cotton Mills shut down on account of lack of orders. --- Cordis Mills, cottons, shut down for three weeks and resumed. September. Millbury Cotton Mills shut down for repairs on en-November. Patent granted to Hudson W. Hakes on hargine; in October, resumed. ness frame for looms. - C. A. Aldrich, woollens, increased to full time. - Edwin Hoyle shut down Ramshorn Weollen Mill indefinitely. --- Portsmouth Mills Co., knit December. John Rhodes Warp Co. made preparations goods, shut down indefinitely. for starting up. --- Whitney, MacDuff, & Co., thread spinners, ran on short time.

Millis. In December, paper mill of M. Gardner destroyed by fire.

Milton. In May, H. W. Furber received patent on new style bicycle shoe.

Monroe. In November, James Ramage Paper Co. made repairs.

Monson. In February, Hermann & Lichten, straw goods, began manufacture of felt goods in new addition. May. S. F. Cushman & Sons, woollens, shut down for repairs on account of accident to machinery. July. R. M. & Theodore Reynolds, woollens, shut down; in August, resumed. August. S. F. Cushman & Sons, woollens, shut down for repairs. October. R. M. & Theodore Reynolds, woollens, added new feeds.

Montague. In January, foundation to new mill of Marshall Paper Co. completed.

March. Turner's Falls Lumber Co. shut down temporarily on account of ice.

April.

The John Russell Cutlery Co. shut down to allow improvements in fire protection system to be made; in June, shut down for inventory.

August. Turner's Falls Cotton Mill started up on full time after shutdown.—John Russell Cutlery Co. shut down.

September. Turner's Falls Paper Co. began improvements at plant.

Natick. In March, W. F. Pfeisser & Co., shoes, reduced running time. — R. C. Dean and Wallace Griffin secured Clark & Groves factory for shoe manufacturing. April. Fessenden, Childs, & Co. and W. F. Johnson established manufacture of shoes. September. Brennan Boot and Shoe Co. incorporated; capital stock \$8,000. November. Patent granted Arthur E. Appleyard on electric heating apparatus.

Needham. In April, William Carter & Co., hosiery, added new knitting machinery.

——Firms of William Roper & Co. and Robert G. Roper & Co., knit goods, consolidated

as Roper Bros. & Co.: in May, addition built to plant. July. Wm. Mosely & Co. and William Carter & Co., knit goods, resumed operations after suspension. October. Wahan Paper Co. made improvements at dam in Charles River. November. Wve Bros. & Co., knit goods, increased force.

NEW BEDFORD. In January, Dartmouth Manufacturing Corporation, cottons, began erection of storehouse, 60 x 250 feet. --- Company organized to manufacture electric dynamos; capital stock \$70,000. - Grinnell Manufacturing Corporation, cottons, began enlargement of plant. --- Strange Forged Drill and Tool Co. organized. --- Pierce Manufacturing Corporation, cottons, damaged by flood. February. Acushnet Mill Corporation, cottons, made plans for erection of new weave shed. --- New Bedford Manufacturing Co., cottons, decided to erect new mill. --- Mount Pleasant Mills Corporation, cottons, voted to sell property at auction. ---- Whitman Mills Corporation, cottons, placed new vertical cross-compound engine. - Preliminary steps taken toward establishment of bleachery. --- Pope's Island Manufacturing Co., metals, added new roll. Grinnell Manufacturing Corporation, cottons, added 25,000 spindles. - Mt. Pleasant Mill, cottons, sold at auction. --- Whitman Mills Corporation, cottons, started up in part. - Pope's Island Manufacturing Co., metals, ran nights and began addition, 25 x 30 feet; completed in April. -- Strange Forged Drill and Tool Co. awarded contract for erection of brick factory. April. W. S. Hill Electric Co. removed from Boston to this place. - Remaining portion of plant of Whitman Mills Co. started up. --- Dartmouth Manufacturing Co., cottons, erected machinery. May. Belt room at Potomska Mills. cottons. damaged by fire. June. Wamsutta Mills, cottons, added new machinery. Alfred Isherwood granted patent on improvements in loom shuttles, consisting of a uniform holeless shuttle spring and means for holding the same in position by a locked bolt and nut. - Wamsutta Mills, 1, 2, 3, 6, and 7, cottons, shut down for repairs and re-- Weavers employed at Whitman Mills, cottons, struck; settled. Michael E. Sullivan invented mechanism for equalizing the difference in and compensating for variation of the strain upon yarn in ring spinning machines. ---- Wamsutta Mills, cottons, added new machinery; mills Nos. 1, 2, 3, 6, and 7 began running alternate weeks in order to curtail production. - Bennett Manufacturing Co. and Columbia Spinning Co., cottons, shut down portion of plant in order to curtail production. Wamsutta Mills, cottons, ordered new combing machines and continued alternate shutting down. - Cotton shed of Bennett Manufacturing Co., cottons, damaged by fire. October. Potomska Mills, cottons, added new machinery. --- Howland Mills Corporation, cottons, made plans for addition to boiler house; of brick, 18 x 40 feet, 32 feet high. -Columbia Spinning Co. and Bennett Manufacturing Co., cottons, shut down for one November. Pierce week. - E. B. Tinkham Shoe Co. discontinued manufacturing. Manufacturing Corporation, cottons, petitioned for leave to erect cotton storehouse; of wood, 75 x 130 feet. - Acushnet Mill Corporation and Hathaway Manufacturing Co., cottons, ran overtime. - Wamsutta Mills, cottons, reduced force on account of lack of orders. December. Beacon Manufacturing Co. formed to manufacture cotton, woollen, and merino yarns; capital stock \$60,000; secured plant formerly operated by Mount Pleasant Manufacturing Co. - Drying shed of City Manufacturing Corporation, cotton yarns, damaged by fire. --- Loom fixers employed at Wamsutta and Potomska Mills, cottons, struck.

Newbury. In June, Byfield Woollen Mills resumed operations after temporary shut-

NEWBURYPORT. In January, new buildings of Fiberloid Co. completed. ton & Thurlow, new firm, established manufacture of shoes. — Towle Manufacturing Co., silverware, built addition. February. Operatives on hand-turned work at factory of Dodge Bros., shoes, struck for increase; granted, and work resumed. March Victoria Mills Corporation, cottons, reduced force. April. Peabody Mills, cottons, added spinning frames and speeders. - Albert Russell & Sons, brass founders, purchased additional plant, --- Plans made for second story addition to clothing factory of Chas. E. Plummer. --- Bottomers and makers at shoe factory of Dodge Bros. struck because of discharge of employé; later resumed work; in May, entire force of 300 struck for same reason; places filled by other workmen and business continued. May. N. D. Dodge & Bliss Co. secured quarters formerly occupied by Wilder & Clark Shoe Co. for removal of business. June. Excelsior Manufacturing Co. established manufacture of shell combs. - Edward Perkins Lumber Co. moved old mill and began erection of new one on site; new mill to be 70 x 140 feet. September. E. P. Dodge Shoe Co. ran on short time.

www libtool com cn

October. Peabody Mills, cottons, reduced wages. November. E. P. Dodge Manufacturing Co., shoes, increased to full time. — Patent granted to Percy B. Jackson on combination divan and to John W. Ackerman on delivery wagon. December. Victoria Mills Corporation offered plant for sale.

New Mariborough. In May, saw mill of Wm. B. Gibson & Son destroyed by fire. September. C. B. Brewer, lumber, shut down temporarily for repairs.

NEWTON. In May, Italian laborers employed on streets struck. June. Mills of Nonantum Worsted Co. shut down permanently. ——George Pettee, formerly of Pettee Machine Co., died, aged 68 years. July. Dudley Mills, knit goods, ran on reduced time. ——Nonantum Worsted Co. ran temporarily to close out stock. November. Patent granted to Wiltsle F. Wolfe on heating and ventilating apparatus and to William S. Hamm and A. W. Eaton on machine for making and driving metallic fastenings.

Norfelk. In April, paper mill of John F. Wall destroyed by fire. July. Enoch Waite began erection of new paper mill to replace one destroyed by fire. December. City Mills Co., woollens, erected new stock house.

NORTH ADAMS. In January, J. M. Canedy, shoes, enlarged plant. -- Gallun & Houghton decided to build new cotton mill. - Blackinton Co., woollens, shut down; in February, resumed operations. February. Linwood Mills, woollens, changed from three-quarters to full time. - New dressing machine replaced one destroyed by explosion at mill of North Adams Manufacturing Co., woollens. --- Lemuel Pomeroy, president March. C. T. Sampson Manufacturing of Blackinton Co., woollens, died, aged 40 years. Co., shoes, decided to add one story to factory. - North Adams Manufacturing Co., woollens, shut down temporarily for repairs. - Eclipse Cotton Mill of Gallup & Houghton started up after shutdown for repairs and addition which doubled capacity. Dunbar Mills Co. and Johnson Manufacturing Co., shut down for three days and resumed on short time. --- North Adams Manufacturing Co. started up on full time after running on short time for past two months; accident to machinery caused temporary May. Land purchased by F. J. Barber for erection of factory shutdown for repairs. to manufacture fancy articles of leather. June. Blackinton Woollen Co. shut down for one week; began giving employés half-holiday on Saturday. - Arnold Print Works and Greylock Mills, cottons, added humidifiers. - Dunbar Mills Co. and Johnson Manufacturing Co. shut down indefinitely. July. Arnold Print Works erected iron smokestack, 128 feet high, on brick pedestal of 10 feet, and made improvements on dam. Blackinton Co., woollens, shut down indefinitely. August. Patrick Conlon invented attachment for woollen carding machines. - Windsor Co., cottons, made alterations and began new addition, 30 x 70 feet, three stories. - Blackinton Co., woollens, started up in part after shutdown of four weeks. --- Beaver Mill, cottons, resumed operations. October. N. L. Millard & Co., shoes, decided to Greylock Mills, cottons, shut down. enlarge factory. - Blackinton Co., woollens, ran on reduced time. November. J. M. Canedy and W. G. Cady & Co., shoes, resumed operations. - Blackinton Co., woollens, increased running time. December. Dunbar Mills and Johnson Manufacturing Co. resumed operations. --- Work begun on addition to shoe factory of N. L. Millard & Co. - Dyeing, carding, and spinning departments of Blackinton Co., woollens, shut down on account of lack of orders. - Finishers at shoe factory of W. G. Cady & Co. struck on account of wages.

NORTHAMPTON. In January, Northampton Cycle Co. began to run nights. ruary. E. M. Couch invented machine for drilling rims of bicycles. March. New industry, the manufacture of wire mattresses, started by Waldo H. Lamb. April. Plant of Holyoke Hydrant & Iron Co. purchased by Northampton men, who decided to remove it to this place. - E. C. Lyman, manufacturer of confectionery, died, aged 65 years. May. Norwood Engineering Co. increased capital stock from \$10,000 to \$55,000 and decided to make additions and improvements. June. Belding Bros. & Co., silks, shut down; in July, resumed operations. July. Holyoke Hydrant & Iron Co. and Norwood Engineering Co. consolidated and plant of former removed to this place; in August, began operations. August. Operations resumed under new management at plant of Crystal Emery Wheel Co. after one year's idleness. October. Northampton Cutlery Co. increased running time. November. Belding Bros. & Co., silks, resumed full time. -Patent granted to William H. Reece on switch throwing device and to William H. Wilder on lamp stove. December. Henry J. Walker, manufacturer of extracts, died, aged 75 years.

226 STATISTICS OF MANUFACTURES. [Pub. Doc. www.libtool.com.cn

North Andover. In January, M. T. Stevens & Sons, woollens, ran overtime. ruary. Brightwood Manufacturing Co. organized to manufacture fine worsted goods: capital stock \$20,000; began operating in April. March. Bay State Dye Works damaged by flood. — Davis & Furber Machine Co. reduced force and began Saturday closing. - George E. Curwen, formerly of Nichols & Curwen, leather, died, aged 35 years. April. New mill erected by B. Bamforth for manufacture of fine shoddies; capacity 10 sets of cards, --- Sutton's Mills, woollens, shut down temporarily for repairs. Stone building at North Andover Mills, used as storehouse, destroyed by fire. Tune. Davis & Furber Machine Co. ran four days per week. - Flooring gave way in building occupied by Brightwood Manufacturing Co., woollens, and Bay State Dyeing and Finishing Co., causing suspension of business. July. Company operating North Andover Mills, woollens, reorganized. — Bay State Dyeing and Finishing Co. erected new office building, 16 x 25 feet, one story. - Sutton's Mills, woollens, shut down indefinitely. August. North Andover Mills, woollens, started up in part. - Davis & Furber Machine Co. reduced running time; in September, portion of plant shut down indefinitely. September. Sutton's Mills, woollens, started up in full. - Weaving department at woollen mill of M. T. Stevens & Sons shut down. November. Patent granted William D. Rundlett on sewing machine.

North Attleborough. In January, North Attleborough Clothes Line Supporter Co. organized and manufacture of specialty established. May. Thomas Totten & Co., jewelry, enlarged space by raising portion of factory; in June, built addition. July. William F. and George H. Mantien formed partnership under name of Mantien Bros., to manufacture jewelry. —Shaw Manufacturing Co. organized to manufacture tollet preparations. — Mason Box Co., jewelry boxes, shut down for stock taking and resumed. — E. Ira Richards & Co., jewelry, shut down temporarily. November. Patent granted to Henry M. Herring on check-rein fastener. December. Bugbee & Niles, jewelry, incorporated as Bugbee & Niles Co., under laws of Rhode Island; capital stock \$32,000. — Clarence P. Elliott became partner in firm of Mantien Bros., jewelry.

Northborough. In February, David F. Wood of Woodside Mills, satinets, died, aged 78 years. April. Woodside Mills, woollens, started up with reduced force. July. E. W. Chapin & Co., woollens, ran one-half of plant on full time. August. Woodside Mills, woollens, shut down indefinitely on account of dull trade; in September, resumed on full time.

Northbridge. In January, Riverdale Woollen Co. ran nights. --- Gas house at Whitinsville Cotton Mills damaged by fire. February. Whitin Machine Works ran nights; work begun on addition to foundry, 60 x 100 feet. March. Linwood Cotton Mills started up business in new addition; carpenter shop damaged by fire; in June, erected new combing machinery. June. Riverdale Woollen Co. shut down indefinitely on account of lack of orders. July. Robert K. Brown began erection of machine shop for manufacture of sash flange and weights, his own invention. ---- Whitinsville Cotton Mills and Linwood Mills, cottons, shut down for one week. --- Riverdale Woollen Co. ran two days per week. August. Whitin Machine Works awarded contract for electric lighting plant; of brick, 50 x 102 feet, one story, with chimney 125 feet high. --- Whitinsville Cotton Mills and Linwood Mills, cottons, shut down for one week. --- Dyehouse of Riverdale Woollen Co. damaged by fire. October. Contract awarded and foundation begun for new storehouse of Riverdale Woollen Co.; 60 x 140 feet, one story. November. Henry A. Owen received patent on top roll saddle for spinning frames .-Woollen Co. resumed full time with full force. December. Whitinsville Spinning Ring Co. reduced running time.

Northfield. In January, Frank Webster's saw mill destroyed by fire.

Norwood. In March, L. A. Merrill began manufacture of shoe tips and findings. July. Winslow Bros., leather, dissolved; business continued under same style by George F. Willett and Edward C. Mills.

Orange. In February, new shirt factory started up. — Efforts made to secure removal of shoe manufacturing firm from Lynn to this place. July. New Home Sewing Machine Co. resumed after shutdown of one week for vacation. September. Harrison H. Whitney, retired furniture manufacturer, died, aged 75 years. October. C. F. Crosby & Co., shirts, shut down for two weeks.

Exford. In March, additional machinery placed in new woollen mill of Nathaniel E. Taft & Son and weave room started up. July. Lasters at shoe factory of A. L. Joslin & Co. struck for restoration. October. Nathaniel E. Taft, woollen manufacturer, died, aged 54 years. November. Andrew Howarth & Son, woollens, shut down for two weeks.

Palmer. In January, Rogers-Osgood Hat Co. shut down indefinitely. Otis Co., Boston Duck Co., and Thorndike Manufacturing Co., cottons, reduced running April. Plant of Rogers-Osgood Hat Co. sold at auction. - Wright & Colton Wire Cloth Co. purchased plant of Palmer Wire Manufacturing Co. and began to make repairs. --- Loftus & Williams, manufacturers of ice-crushers, sold patent to New York firm. - Thorndike Manufacturing Co., cottons, began erection of addition to tower of No. 2 mill, to accommodate tank as means of increasing fire protection system; in May, began construction of cistern and increased running time. May. Otis Co., cottons, which had been running full on half time began running half of plant on full July. Wright Wire Co. dissolved and consolidated with Wright & Colton Wire Cloth Co. - Boston Duck Co. built addition to boiler house; of brick, one story. August. James J. Griffin received patent on machine for cutting pipe. - Holden & Fuller, woollens, shut down on account of lack of orders. — Franklin Blanchard, retired wooden goods manufacturer, died, aged 78 years. October. E. A. Brown & Co.. wagons, organized stock company; capital stock \$13,000; plans made for erection of new factory, of brick, 40 x 60 feet, three stories. - Holden & Fuller, woollens, resumed operations. — Thorndike Manufacturing Co., cottons, increased running time. vember. Holden & Fuller, woollens, resumed operations on full time.

Peabedy. In January, leather factory of P. Lennox & Co. started up after shut-April. Wyman B. Richardson, formerly of the firm of Richardson & Doyle, leather, died, aged 71 years. June. Peter H. Brown established manufacture of innersoles. --- Newman Perkins, leather manufacturer, died, aged 67 years, --- Lasters at shoe factory of Warren, Shaw, & Co. struck for increase; shutdown of plant occurred in consequence. July. John F. Moore admitted to firm of Benjamin N. Moore; style changed' to Benjamin N. Moore & Son. - A. C. Lawrence & Co., leather, began erection of new factory, 40 x 150 feet, two stories. — Glue works of George Upton shut down. George Foam & Son, morocco, discontinued manufacturing. September. New factory of A. C. Lawrence & Co., leather, completed. November. Patent granted to George F. Bailey on combined door securer and key ring chain. --- A. B. Clark awarded contract for erection of new woollen mill; to be 45 x 125 feet, five stories; erection begun in December. - Tannery of Richard Smith & Son damaged by fire. December. George J. Winchester & Son, tanners, dissolved.

Pepperell. In March, Leighton Bros., shoes, shut down temporarily. July. Elbert Leighton of firm of Leighton Bros., shoes, died, aged 59 years. August. Nashua River Paper Co. made improvements in dam. October. New shoe factory established by Sliney Brothers. November. Shoe factory of Leighton Bros. purchased by Gregory & Shaw and started up. — J. J. Piper established manufacture of brooms.

PITTSFIELD. In January, Robbins-Kellogg Co., shoes, changed name to O. W. Robbins Shoe Co. February. John V. Barker, retired woollen manufacturer, died, aged 89 years. - Plant of Sprague-Brimmer Manufacturing Co., shirts, destroyed by fire; in March, remaining stock sold to parties in Boston and manufacture of Berkshire shirts to be carried on there. March. Berkshire Typewriter Paper Co. organized; capital stock \$6,000. - Peck Manufacturing Co., woollens, shut down temporarily for repairs on engine. - Stock subscribed for establishment of new industry, the manufacture of window blinds. — Pittsfield Lumber Co. placed new wood-turning machines. Italian laborers employed on public works and moulders at iron foundry of E. D. Jones' Sons & Co., struck. May. Shutdown of few days occurred at shoe factory of O. W. Robbins Shoe Co. ---Masons, plasterers, and bricklayers struck for reduction in hours. June. Pittsfield Shoe Co. incorporated under laws of New Hampshire; capital stock July. Russell Manufacturing Co., woollens, added machinery. - Berkshire Overall Co. changed name to Berkshire Manufacturing Co. - Peck Manufacturing Co. resumed operations at lower mill. - E. D. Jones' Sons & Co., iron founders, ran overtime. August. Work begun on new factory for manufacture of brass mouldings by Frank Burget. — Arrangements made by T. S. Morse for manufacture of carpenters' folding squares, his own invention. - O. W. Robbins Shoe Co. resumed operations after two weeks' shutdown for repairs. - Peck Manufacturing Co. resumed operations

228 STATISTICS OF MANUFACTURES. [Pub. Doc. www.librool.com.cn

-Wm. E. Tillotson and Russell Manufacturing Co., woollens, ran on short time. - D. M. Collins & Co., knit goods, shut down indefinitely; 200 operatives affected. - Taconic Mills, woollens, shut down indefinitely. September. Stanley Electrical Manufacturing Co. installed new boilers. - Russell Manufacturing Co., woollens, decided to build addition to finishing room, 30 x 35 feet. - Wm. E. Tillotson. woollens, started up card room after temporary shutdown and installed new dyeing machinery. - Taconic Mills, woollens, resumed operations. October, John F. Kelly received patent on electrical apparatus. ---- Wm. E. Tillotson, woollens, began erection of addition to mill, 20x50 feet. - Wilson & Horton started up Bel Air woollen mill. -D. M. Collins & Co., knit goods, resumed operations. --- Planing mill of Zadock A. Ward destroyed by fire. November. Patent granted to Cummings C. Chesney and J. F. Kelley on system of electrical distribution; assigned to Stanley Electric Manufacturing Co. - Pontoosuc Woollen Manufacturing Co. leased mills of Pomeroy Woollen Co. and started up on orders. --- Wilson & Horton reduced wages in specking December. Stanley Electrical Manufacturing Co. voted department of Taconic Mills. to increase capital stock from \$300,000 to \$500,000. - Pontoosuc Woollen Manufacturing Co. made changes in machinery; ran portion of plant of Pomeroy Woollen Co. overtime. -Sisson & Robinson, paper boxes, moved into new quarters. --- Portion of Bel Air woollen mill shut down. - Lasters at factory of Cheshire Shoe Manufacturing Co. struck; settled.

Plymenth. In January, Safety Seamless Pocket Co. shut down and removed to Lowell. March. New wing added to plant of Plymouth Foundry Co. — Former straw factory secured by Plymouth Garment Co. for establishment of new industry. — Paine & Hersey, shoes, dissolved; business continued by P. I. Hersey. May. Russell Mills, cottons, shut down indefinitely. June. Plymouth Cordage Co. ran nights. — Loring & Parks, tacks, shut down, July. Plymouth Woollen Co. added new machinery and made alterations. — Plymouth Foundry Co. sold plant to new firm; to be operated under name of Plymouth Stove Foundry Co.; started up in August. November. Standish Worsted Co. resumed full time. — Plymouth Woollen Co. started up. December. Russell Mills Co., cotton duck, decided to dispose of plant.

Princeton. In May, Atwood B. Keyes granted patent on wheel rim.

Provincetown. In July, Leominster Shirt Co. discontinued manufacture in branch factory in this place.

QUINCY. In January, Bay State Aluminum Co. began manufacture of kitchen utensils. February. P. Beck granted patent on blind painting machine. — Work begun on new shoe factory for John R. Graham. April. Strike occurred among stone-cutters employed by Craig & Richards Granite Co. June. Employés of Quincy Cycle Co. struck. August. Strike occurred at shoe factory of John R. Graham; settled. September. Strikes occurred among bricklayers and granite cutters. November. Patent granted to R. Stephenson on black leading machine.

Bandolph. In February, Richards & Brennan established manufacture of shoes. *May.* Bradley, Hagney, & Leonard, shoes, shut down temporarily; in September, strike occurred among lasters; settled in November.

Reading. In April, Munroe & Co., shoes, removed business from Salem Depot, N. H., to this place. — Jacob M. Cropley & Bro., shoes, removed to Somersworth, N. H. — Clifford P. Weston, shoes, went out of business. *October*. Chandler & Urann established manufacture of shoes. *December*. Edwin A. Vinton of Stoneham, leased quarters for removal of shoe manufacturing business to this place. — Manufacture of leather shoe strings established.

Bevere. In July, Charles H. Kelley granted patent on lasting machine. *November*. Patent granted to Charles Hatch, Jr., on heat insulator.

Bockland. In January, Rice & Hutchins, shoes, ran nights. *March.* Nathan B. Foster and J. F. Thompson established manufacture of shoe blackings and stains. *July.* Bockland Co-operative Association established to manufacture shoes; incorporated; capital stock \$1,000. *November.* French, Shriner, & Urner, shoes, started up. — Hall, Gallagher, & Foulke, shoes, dissolved; succeeded by Lane & Gallagher.

Reckport. In May, laborers employed on street railway struck for increase in wages.

August. Storehouse at factory of Cape Ann Oil Clothes Co., destroyed by fire.

Ecwley. In January, Mooney & Richardson, heels, shut down few days for repairs.

— D. N. Prime Shoe Co. shut down indefinitely. June. Burke Heel Co. shut down indefinitely. August. Milton Ellsworth, heels, shut down temporarily. November. S. A. Boynton, heels, resumed after several weeks' shutdown. December. D. N. Prime Shoe Co. placed new boiler.

Russell. In August, Fairfield Paper Co. reorganized and business resumed after temporary suspension.

Butland. In July, Lakeville Woollen Cc. shut down for two weeks' vacation.

SALEM. In January, A. W. Copp Box Co. organized; capital stock \$5,000,-Nugent Bros., specialty in shoes, moved to Beverly. February. Foundations of new buildings at Adamanta Works completed. — Naumkeag Steam Cotton Co. started up thirty-eight new revolving top flat cards. — Shoe shop of Thomas F. Hayes damaged by March. Salem Foundry & Machine Co. sold plant and purchased site for new buildings elsewhere. April. James F. Flynn, shoe findings, died. - Strike occurred among masons. May. Albert F. Jones granted patent on bark mill. --- Work begun on new building of Salem Foundry & Machine Co.; of wood and brick, 50 x 130 feet, one June. Work begun on new shoe factory for P. A. Field & Co. of Beverly; to be of brick, 174 x 80 x 16 feet, five stories. — George E. Stanley, spring beds, completed new building to be used as factory and wareroom. --- Mills No. 3 and 5 of Naumkeag Steam Cotton Co. shut down indefinitely and remaining portion of plant ran on reduced -George F. Putnam, leather, shut down. --- Benjamin Symonds, retired leather manufacturer, died, aged 86 years. July. John J. Cunney & Co., morocco, began addition to factory. - Albert Warren Co., shoes, removed to Beverly. - Factory of John Powers, findings, damaged by fire. August. Benjamin Shreve of Shreve. Crump. & Low, jewelry, Boston, died, aged 83 years. September. Naumkeag Steam Cotton Co. started up 400 looms in No. 5 mill. - John Powers, pioneer manufacturer of shoe findings, died, aged 70 years. --- Plant of John J. Cunney & Co., morocco, destroyed by fire. November. Bayard J. Taylor and E. F. Knight established manufacture of fancy articles from hoofs and horns. - Time reduced at shops of Boston & Maine railroad. ber. Lucius B. Packard invented an electrical carriage.

Saugus. In November, A. A. Scott, woollens, resumed operations after four weeks' suspension.

Shelburne. In January, Mayhew & Wilkins, silks, ran nights and installed electric lights. May. Henry A. Axtell granted patent on grinding and finishing machine. June. Peg factory of J. R. Foster shut down for two months. — Mayhew & Wilkins, silks, started up after shutdown. June. Lamson & Goodnow Manufacturing Co., cutlery, made repairs on dam and resumed operations after shutdown; in September, erected storage house.

Shirley. In May, C. A. Edgarton Manufacturing Co., suspenders, shut down portion of plant temporarily and moved into new addition; in June, indefinite shutdown occurred; in August, resumed on reduced time and added machinery. *December*. Shirley Woollen Co. added story to portion of plant.

Somerset. In February, plant of Somerset Stove Foundry Co. destroyed by fire; to be rebuilt. *April*. Work of rebuilding plant of Somerset Stove Foundry Co. begun; .40 x 200 feet and 50 x 100 feet; in August, completed and operations resumed.

buttons and Joseph H. Nason on tension device for shuttles; assigned to H. M. Hewes, Boston. August. John Haigh, proprietor of Middlesex Bleach, Dye, and Print Works, died, aged 64 years. September. Leander D. Junkins granted patent on lasting tool.—J. A. Taspey, inventor of scroll sewing machine and fire escape, died, aged 72 years. October. Plant of Daniel E. Chase & Co., distillers, destroyed by fire. November. Union Glass Co. resumed operations after shutdown of three months.—Following patents granted: To Erastus Woodward on machine for loading heels with nalls; to Thomas

230 STATISTICS OF MANUFACTURES. [Pub. Doc. www libtool com.cn

H. McQuown on handle bar for bicycles; to James H. Crosby on smoke consuming furnace; to Benjamin F. Smith on driven well system. December. Patent granted to George H. Gregory on apparatus for manufacturing gas. — Factory of Holland & Daniels, window shades, destroyed by fire.

Southborough. In August, Cordaville Woollen Co. resumed operations after four weeks' shutdown; in December, shut down temporarily.

Southbridge. In January, Hamilton Woollen Co. added new boilers.—Southbridge Printing Co. increased fire protection system. February. Stephen Richards & Son, cutlery, erected addition to accommodate new boiler. March. Central Mills Co., cottons, placed twelve new spinning frames; in April, reduced wages. April. Hamilton Woollen Co. began running on summer schedule, allowing employés half-holiday on Saturday; in May, shut down for introduction of new work and added machinery. July. Hamilton Woollen Co. shut down portion of plant indefinitely. August. Litchfield Shuttle Co. shut down for one week. October. Hamilton Woollen Co. placed new boilers.—Southbridge Printing Co. ran overtime; in November, made repairs. December. Stephen Richards, tools, changed style to Richards Cutlery and Optical Manufacturing Co.; capital stock \$15,000.—American Optical Co. increased space by raising roof of portion of plant.—Southbridge Printing Co. ran overtime.

South Hadley. In January, mill of Hampshire Paper Co. started up. March. Cloth room of Glasgow Manufacturing Co., cottons, damaged by fire. April. Carew Manufacturing Co., paper, resumed work after shutdown.—Glasgow Manufacturing Co., cottons, decided to shut down in order to curtail production. May. Carew Manufacturing Co., paper, shut down a few days for repairs to machinery; in June, similar shutdown occurred. August. B. F. Perkins & Son, paper, shut down temporarily to allow new wheel to be placed. September. Lynch Bros., bricks, dissolved; new corporation, Lynch Bros. Brick Co., formed; capital stock \$21,000. December. Hampshire Duck Coat Co. organized to manufacture clothing.

spencer. In January, Isaac Prouty & Co., shoes, increased working force. --- Spencer Woollen Mills started up after several weeks' shutdown. - Massasoit Knitting Co. started manufacture of underwear. February. Isaac Prouty & Co., shoes, increased force. - E. Jones & Co. and J. E. Bacon & Co., shoes, ran on reduced time. - John Goddard introduced new machine for stamping bottoms of shoes. muc Paper Box Co. ran overtime. April. J. E. Bacon & Co., shoes, shut down for May. Spencer Wire Co. made repairs and improvements. June. Dufton Bros., woollens, erected new picker house. July. Newton Darling purchased plant of Spencer Woollen Mills Co.; in August, started up No. 1 mill and made repairs on mill No. August. John G. Avery invented new style water filter. September. Isaac Prouty & Co., shoes, ran overtime. October. Spencer Woollen Mills Co. started up portion of plant. November. Isaac Prouty & Co., shoes, resumed operations after shutdown for repairs. - Bacon & Sibley, shoes, enlarged capacity and began erection of boiler house, 15 x 60 feet. - Spencer Woollen Mills Co. ran carding and spinning rooms nights and increased force. - Erastus Jones & Co., shoes, shut down temporarily for repairs and resumed. December. Massasoit Knitting Co. resumed operations. - Dufton Bros., woollens, started up mill on satinets. - Total shipment of shoes for the year 1896 was 136,943 cases; for the year 1895 was 124,822 cases; increase, 12,121 cases, or 9.71 per cent.

man Valve Co. added machinery. February. Buchanan, Bolt, & Co., wire goods, added three new looms. — G. J. Prew and F. T. Labelle established manufacture of bicycles. — Alvin M. Cushing invented spring heels for boots and shoes. — Metallic Drawing Roll Co. ran overtime. March. E. S. Stacy, mill supplies, ran overtime. — Springfield Foundry Co. and Easthampton Valley Pump Works combined and incorporated under name of The Springfield Elevator and Pump Co.; capital stock \$100,000. — Women in employ of Bay State Corset Co. struck for increase in pay. April. Plant of Hampden Corundum Wheel Co., emery wheels, damaged by fire and work suspended; to be rebuilt. May. John F. Barker granted patent on signaling apparatus. — Elektron Manufacturing Co., machinery, made plans for erection of addition, 40 x 70 feet, three stories. — Portion of government contract for furnishing envelopes awarded Springfield Envelope Co. — Hampden Corundum Wheel Co. resumed business with reduced force and began work of repairing and rebuilding. — Orrick H. Greenleaf, paper manufacturer, died,

June. National Needle Co. began erection of addition, 31 x 54 feet, three aged 73 years. - Plans made for new factory of Bausch & Harris, machinery, of Holyoke; work stories. begun in July. - Holyoke Card and Paper Co. increased capital stock from \$100,000 to \$150,000. — Smith & Wesson, pistols, shut down for inventory. — Indian Orchard Co., cottons, ran on reduced time. July. Eureka Plaster Co. incorporated; capital stock \$20,000; work on factory building begun; of wood, 50 x 70 feet, three stories. — D. B. & R. H. Hawes granted patent on electric lights for cold storage rooms, so arranged that when the door was opened the lights were lit, and when closed, automatically put out. August. Marcus Tremblay granted patent on switch for electric railways that can be ouerated from the platform of the car. - Highland Brewing Co. made additions to plant. -Wason Manufacturing Co., railroad cars, reduced force. — Agawam Manufacturing Co., knit goods, shut down for annual inventory and repairs. - Factory of National Photo Paper and Chemical Co. destroyed by fire; work of rebuilding begun. Sentember. Smith & Wesson, pistols, awarded contract for new office building. - Hutchins Manufacturing Co. organized to manufacture musical instruments from aluminum. tober. Factory of National Photo Paper and Chemical Co. rebuilt. November. Patents granted as follows: To Edward N. Richards on truck for railway cars: to John E. Stannard on bicycle pedal clip; to Charles E. Van Norman on milling machine; to Albert C. Newcomb on apparatus for filtering and clarifying liquids: to David F. Graham on underfeed stoker; to Joseph B. Hamilton on magnetic separator; to John D. Browne on rotable sign for street cars; and to James F. Duryea on motor vehicle. December. Wason Manufacturing Co., railroad cars, shipped orders to Brazil. - Chris. Kuenzel invented chainless bicycle.

Stockbridge. In August, C. E. Callender, paper, shut down for two weeks and resumed; manufacture of tissue paper begun.

Sterling. In May, Washecum Pottery Co. shut down indefinitely.

Stoneham. In March, Thomas J. Quinn received patent on leather graining machine. June. Strike occurred among Italian laborers on sewer. July. Frank Bryant, shoes, decided to retire from business. August. E. W. Noyes, shoes, removed from Haverhill to this place. October. Strike occurred among Italian laborers. November. T. H. Jones, shoes, increased force. December. Edwin A. Vinton, shoes, secured quarters for removal of business to Reading.—T. H. Jones, shoes, reduced force and running time.— Strike occurred at factory of F. B. Jenkins, shoes; settled.

Stoughton. In January, J. & H. Fitzpatrick, shoes, shut down for placing of new boiler. February. J. Beals, knit goods, decided to shut down permanently. April. Upham Bros. & Co., shoes, ran with reduced force. — Wallace, Elliott, & Co., shoes, shut down and decided to remove business from this place. October. French & Wales, new firm, established the manufacture of shoes; in December, incorporated as Wales-French Shoe Co. — J. & H. Fitzpatrick, shoes, increased output.

Stow. In May, C. W. & A. D. Gleason, woollens, began running on full time; in November, made changes in machinery and installed electric lights.

Sturbridge. In November, Fiskdale Mills, cottons, started up full.

Sutton. In February, Sutton Woollen Co. resumed operations. May. Sutton Manufacturing Co., cottons, shut down indefinitely; repairs to be made. July. Sutton Manufacturing Co., cottons, began repairs at plant preparatory to starting up .chang Mills, cottons, reduced to three quarters time. - D. T. Dudley Shuttle Co. shut August. Sutton Manufacturing Co., cottons, resumed down for repairs and resumed. September. David T. Dudley of the D. T. Dudley Shuttle Co., died, aged operations. 79 years. October. Print cloth works of Sutton Manufacturing Co., cottons, resumed operations. - Manchaug Mills, cottons, added new machinery. - Plant of Sutton Woollen Co. destroyed by fire. November. Sutton Manufacturing Co., cottons, started -D. T. Dudley Shuttle Co. resumed full time. - Shoddy up remaining portions of plant. mills of Samuel A. Prescott and Fred S. Smith started up.

Swampscott. In August, boat building establishment of E. Gerry Emmons destroyed by fire. *November*. Patent granted to Elihu Thomson on controlling electric arcs.

TAUNTON. In January, Corr Manufacturing Co., cottons, ordered 1,000 looms for equipment of proposed new mill.—Company organized to manufacture stockings.

232 STATISTICS OF MANUFACTURES. [Pub. Doc.

February. Contract awarded for mill of Corr Manufacturing Co., cottons; to be 102 x 736 feet, with canacity of 80,000 spindles and 2,000 looms; work begun in March Anril Mason Machine Works received from Northrup Loom Co. license to build looms with the Draper automatic filling supply device and warp stop motion. — Cohannet Mills, cottons, made alterations in picker room and added machinery. - Factory of White. Warner. & Co., stoves, damaged by fire. May. Reed & Barton, silverware, shut down on account of dull trade. - Taunton Iron Works shut down for two weeks. - Stock of S. A. Dudley, shuttles, damaged by fire. June. Cohannet Mills, cottons, erected picking machinery. — Taunton Iron Works shut down for two weeks. — Nemasket Mills, cottons, increased force; in July, completed repairs on dam. July. Machinery placed in new mill of Corr Manufacturing Co., cottons. --- Reed & Barton, silverware, and Weir Stove Co. resumed operations. — Canoe River Mills, cottons, ran on short time. — D. D. White Shoe Co. discontinued manufacturing. — Whittenton Manufacturing Co., cottons, reduced running time to three ten-hour days. August. Eagle Mill, cottons, changed owners. — Foundry of O. G. Thomas resumed operations. September. Poole, Roche, & Co., silverware, changed from short to full time. - Mason Machine Works reduced November, Taunton Wire Nail Co. ran running time on account of lack of orders. -Patent granted to Berthold Huber on printing press and to Winfield S. Huson on mechanical movement for printing presses. December. Corr Manufacturing Co., cottons, started up. -- Taunton Locomotive Manufacturing Co. and Nemasket Mills. cotton yarns, started on full time. -- Strike occurred among loom fixers at mills of Whittenton Manufacturing Co., cottons; settled.

Templeton. In January, Winchester Box Manufacturing Co. added new machine. February. Otter River Mills shut down for an indefinite period. May. Plant of Holman & Harris, wooden goods, destroyed by fire; to be rebuilt; in June, business resumed in old shop. October. D. L. Thompson & Son and Smith, Day, & Co., chairs, ran on reduced time. — Holman & Harris, wooden goods, completed new factory, placed machinery, and started up.

Topsfield. In April, W. H. Herrick, shoes, decided to build addition to factory.

Townsend. In June, saw mill of B. & A. D. Fessenden destroyed by fire; in July, rebuilt.

Upton. In June, Nelson & Ladow, straw goods, completed season's work.——William Knowlton & Sons, straw goods, began work on felt. November. Nelson & Ladow, straw goods, resumed full time.——Plant of William Knowlton & Sons, straw goods, damaged by explosion.

Uxbridge. In January, Calumet Mill, woollens, started up on eight-hour time after shutdown of several weeks. February. Scott & Wheelock, woollens, dissolved partnership and shut down. April. Calumet & Hecla Mills, woollens, ran on three-quarters time. — Shoddy mill of D. Morey Lee destroyed by fire. May. Calumet Mill, woollens, closed out stock preparatory to shutting down; in June, shut down. June. A. A. Sprague invented apparatus for dyeing which does not necessitate the removal of goods from the tub. October. Capron Woollen Co. and Hecla Woollen Mill resumed operations. — Scott & Wheelock, woollens, made repairs preparatory to starting up.

Wakefield. In January, Thomas Emerson's Sons, shoes, dissolved; business continued by new firm under same style. — Wakefield Rattan Co. started up after two weeks' shutdown. July. Factory of Rogers & Ferguson, gloves, destroyed by fire. August. Boit Knitting Co. organized for the manufacture of knit goods. December. Wakefield Rattan Co. increased force.

Wales. In January, Elijah Shaw, retired manufacturer, died, aged 77 years. August. Excelsior Woollen Co. reduced wages; 100 employés affected; strike followed; settled; in December, shut down for one week and placed new engine.

Walpole. In March, works of Walpole Dye and Chemical Co. damaged by fire.

June. Plant of Lewis Batting Co. damaged by fire.

July. S. Gray & Co., bleaching and dyeing, discontinued night work and reduced force.

WALTHAM. In January, new bloycle factory, erected by Thompson & Howe, completed. — Dueber Watch Case Manufacturing Co. and American Waltham Watch Co.

www libtool com en

shut down for stock taking and repairs. - J. L. Thompson Manufacturing Co., buckles, shut down temporarily. February. United States Watch Co. petitioned to Legislature for permission to dissolve corporation. — High water delayed work at plant of Boston Manufacturing Co., cottons. — American Waltham Watch Co. reduced wages: employés objected to reduction and settlement effected. March. Boston Manufacturing Co., cottons, increased working force by 300, and added new boilers and automatic machinery for dveing. - American Waltham Watch Co. reduced running time to five days per week. -Strikes occurred among employés of Boston Manufacturing Co., cottons, and American Waltham Watch Co. because of dissatisfaction with wage schedules. Anril Plant of Boston Manufacturing Co., cottons, shut down one week for stock taking; in May, reduced running time to four days of ten hours each and shut down hosiery department June. Waltham Bleachery & Dye Works reduced to three-quarters time. temporarily. American Waltham Watch Co. shut down for annual vacation. --- Charles A. Eddy. retired manufacturer of sashes and blinds, died, aged 73 years. July. Boston Manufacturing Co., cottons, began running mills Nos. 1, 2, and 3 alternate weeks; ran mill No. 4 on 55 hour basis; in August, reduced wages in No. 4 mill and shut down remaining portion of plant. --- O'Hara Waltham Dial Co. shut down indefinitely. --- American Waltham Watch Co. ran on reduced time; later, shut down. September. Boston Manufacturing Co., cottons, resumed operations on full time. -- American Waltham Watch Co. started up on part time after shutdown, --- Laborers employed on water works October. John Stark, watch tools, built addition to factory. --- Waltham Bleachery and Dye Works resumed full time. - Boston Manufacturing Co., cottons, began manufacture of silk linings. ---- American Waltham Watch Co. increased running time and reduced wages. November. Patent granted to Thomas Curley on door check and to Arthur Sidwell on bicycle frame. - American Waltham Watch Co. increased December. Boston Manufacturing Co., cottons, started up additional to full time. looms.

ware. In January, George H. Gilbert Woollen Manufacturing Co. added machinery to manufacture worsteds. February. Erection of three-story shoe factory of wood begun. — John Kennedy, inventor of Otis gusset and other knitting machinery, died, aged 46 years. March. Partial shutdown occurred at mills of Otis Co., cottons, on account of dull trade. April. Joseph T. Wood & Co., shoes, removed from West Brookfield to this place. May. Otis Co. demolished stone storehouse in order to erect new one of brick. June. Portion of No. 4 mill of George H. Gilbert Manufacturing Co., woollens, shut down indefinitely. July. Otis Co., reduced wages in hosiery and stockinet departments; 700 employés affected. August. George Eddy of George Eddy Shoe Co., died, aged 69 years. September. Otis Co., resumed full time and reduced wages; later, a strike occurred; in October, plant shut down indefinitely; later, resumed.

Warren. In February, Bradford Yarn Co. of Brookfield, leased cotton warp mill of M. K. Whipple and made repairs; in March, placed new machinery. March. Running time at Warren Cotton Mills reduced to 30 hours per week. ——Sayles & Jenks, woollens, shut down for two weeks on account of dull trade; in April, reduced wages. April. Warren Cotton Mills made improvements in spinning machinery; in July, completed erection of new weave shed, 207 x 440 feet, one story. December. George F. Blake Manufacturing Co., pumping engines, decided to remove entire plant to Cambridge.

Watertown. In March, new shoe factory erected. June. George H. Hood, former president of Boston Bubber Co., purchased land and began erection of rubber factory. — Walker and Pratt Manufacturing Co., stoves, purchased land for erection of new foundry; in July, resumed operations after three weeks' idleness. August. Union Carpet Lining Co. made improvements and increased capacity. — Hollingsworth & Whitney Paper Co. shut down for one month. — Union Bag & Paper Co. shut down for two weeks; in September, resumed. November. Hood Rubber Co. began the manufacture of specialities in rubber. December. Patent granted to William H. Howe on sounding board for planes.

Wayland. In February, F. A. Howe and O. C. Ewing & Co., shoes, started up.—Chas. W. Dean, shoes, after shutdown for stock taking and repairs, resumed on part time.—N. C. Griffin, shoes, ran on short time. *April*. Charles W. Dean, shoes, decided to enlarge plant; in May, purchased at auction factory formerly occupied by Bent Bros. Co., shoes. *June*. William H. Bent of Bent Bros. Co., shoes, died, aged 56 years. *July*. Chessman & Brown, shoes, purchased land and began erection of new factory. *August*.

N. C. Griffin, shoes, began erection of addition to factory. shoes, moved into factory formerly occupied by Bent Bros. December. Strike occurred among lasters at shoe factory of N. C. Griffin.

Webster. In January, John Chase & Sons, woollens, started up on short time after February. Josiah E. Perry, woollens, shut down indefinitely; later, started up on reduced time. - Partial shutdown of few days occurred at shoe factory of A. J. Bates & Co. --- Plans made and contract awarded for addition to weave shop, 70x140 feet, at plant of H. N. Slater Manufacturing Co., cottons. March. Josiah E. Perry. woollens, ran on full time. April. Slater Woollen Co. and H. N. Slater Manufacturing Co., cottons, reduced running time to 30 hours per week. May. H. N. Slater Manufacturing Co. cottons, shut down for repairs. — Slater Woollen Co. resumed full time. Joel Goddard & Co., sashes and blinds, shut down indefinitely. June. A. J. Bates & Co.. shoes. shut down a few days for repairs. — John Chase & Sons, woollens, and box factory of J. D. Putnam & Son ran with reduced force. - Josiah Perry, woollens, shut down for a few weeks: repairs to be made. --- Slater Woollen Co. shut down indefi-July. A. J. Bates & Co., shoes, shut down for repairs and resumed; in August, awarded contract for new addition, 30 x 35 feet, three stories. August. Slater Woollen Co. resumed operations. --- H. N. Slater Manufacturing Co., cottons, began erection of new addition, 100 x 100 feet; shut down for two weeks; damaged by fire. September. Josiah Perry, woollens, resumed operations after two weeks' shutdown. - John Chase & Sons, woollens, started up in part. October. Slater Woollen Co. resumed full time. November. New addition at shoe factory of A. J. Bates & Co. completed.

Westborough. In January, Reliable Manufacturing Co. organized; building leased and fitted up for manufacture of shirtwaists and cotton underwear: in February. manufacture begun. February. Humber & Co., bicycles, increased force and ran overtime. - Gould & Walker, shoes, increased force. - Hunt Manufacturing Co., bicycle supplies, ran nights. March. Reliable Manufacturing Co., cotton clothing, added new machines and increased force. April. Humber & Co., bicycles, ran nights. -Hunt Manufacturing Co., bicycle supplies, decided to enlarge plant. —— Ariston Cycle Co. and Reliable Manufacturing Co., clothing, ran overtime. May. Hunt Manufacturing Co., bicycle supplies, built new addition; in June, discontinued night work. June. New company organized to manufacture brass and iron bedsteads. T. W. Hines & Co., straw goods, closed New York factory and removed machinery and stock to this place. August. Hunt Manufacturing Co., bicycle supplies, added new September. F. V. Bartlett & Co., boxes, built addition. machinery. October. Hum. ber & Co., blcycles, began erection of new addition, 40 x 90 feet, two stories. — Reliable Manufacturing Co., clothing, secured quarters in Worcester and began removal of busi-November. Cycle Improvement Co. ran overtime. ness to that place. Hunt Manufacturing Co., bicycle supplies, increased force. - Lasting room at shoe factory of Gould & Walker ran nights.

West Boylston. In January, West Boylston Manufacturing Co., cottons, damaged by fire. February. Metropolitan Water Board made plans for reservoir which included site of plant of West Boylston Manufacturing Co. May. William B. Fitz granted patent on loom temple. June. West Boylston Manufacturing Co. sold plant to Metropolitan Water Board and shut down permanently. — L. M. Harris Manufacturing Co., cottons, began running on summer schedule, giving employés half holiday on Saturday. July. Clarendon Mills, cottons, shut down temporarily on account of accident. — Shoe factory of Howe, Morton, & Lovell secured by Metropolitan Water Board. August. Clarendon Mills, cottons, shut down; in September, resumed.

West Bridgewater. In May, Charles E. Tisdale & Co., shoes, introduced lasting machines; in October, increased space. December. Edward Tisdale of firm of Charles E. Tisdale & Co., shoes, died in Brockton, aged 74 years.

West Brookfield. In February, accident to engine caused temporary suspension at shoe factories of J. T. Wood & Co. and McIntosh & Co. April. Joseph T. Wood & Co., shoes, removed business to Ware. May. Cutters at factory of McIntosh & Co. resumed work; in July, temporary shutdown occurred. October. Tyler-Moulton shoe factory removed from Brookfield to this place. — Quarters secured for establishment of mattress factory. November. C. L. Olmstead, corsets, started up on full time.

Westfield. In February, Westfield Brick Co. doubled capacity. — J. W. Foster granted patent on thread-winding or spooling machine. — Employés of Textile Manufacturing Co., coffin trimmings, struck because of reduction; settled by compromise. March. Pomeroy & Van Duesen, whips, shut down temporarily on account of high water. April. Belden & Hoffman, new firm, purchased business of J. W. Loomis and established manufacture of cigars. June. Col. J. A. Lakin invented instrument which enables deaf persons to hear; to be known as the compound micro audiphone; arrangements made for its manufacture. — Stock subscribed for establishment of plant of Lozier Bicycle Co. of Toledo, Ohio, in this place. — Girls employed in plating room of Crane Bros. paper mill struck; settled. August. H. B. Smith, steam heating apparatus, reduced force: November. Crane Bros., paper, completed erection of new boiler house, 33 x 40 feet, with smoke stack 132 feet high.

Westford. In August, Abbott & Co., woollens, started up on reduced time after shutdown; in November, increased to full time.

Westminster. In March, Battles & Goodridge, lumber, started up.

West Newbury. In January, few days' shutdown for repairs occurred at comb factory of S. C. Noyes & Co. — W. B. Chaplin, shoes, increased force. May. S. C. Noyes & Co., combs, shut down temporarily. June. W. B. Chaplin, shoes, shut down indefinitely. — S. C. Noyes & Co., combs, shut down few days for repairs. September. W. B. Chaplin, shoes, ran on part time. October. S. C. Noyes & Co., combs, suspended operations for one week. November. W. B. Chaplin, shoes, resumed full force.

Westport. In December, Westport Manufacturing Co., carpet yarns, installed automatic fire extinguishing system.

West Springfield. In April, Mittineague Paper Co. added story to stock house and made improvements. May. Agawam Paper Co. made improvements and adopted new time schedule, reducing working time. July. Agawam Paper Co. resumed operations after three weeks' shutdown for repairs. — Mittineague Paper Co. shut down for one week. August. Southworth Co., paper, resumed operations after three weeks' shutdown for repairs. — Worthy Paper Co. shut down for ten days. September. Running time reduced at repair shops of Boston & Albany Railroad.

Weymouth. In March, M. C. Dizer & Co., shoes, increased output. — Shop of L. V. Tirrell, shoe strings, secured by Leather Novelty Co.; in April, manufacture of small articles in leather begun. April. John E. Mann, wool scourer, made improvements in machinery. May. Hand-sewers employed at shoe factory of Edwin Clapp struck for increase in wages; settled. July. Stitchers at shoe factory of H. B. Reed & Co. struck on account of dissatisfaction with new price list; settled in August. September. South Weymouth Shoe Lace Co. formed. November. T. John Evans, Thomas Slattery, and L. Winthrop Bates formed partnership and leased factory for the manufacture of shoes. — George E. Porter, shoe manufacturer, died, aged 69 years. December. T. J. Evans & Co. established manufacture of shoes. — Atherton Tilton purchased business of George E. Porter.

Whitman. In January, Commonwealth Shoe & Leather Co. increased force.—Smith & Stoughton Corporation, shoes, shut down indefinitely; in February, started up to complete work on hand. February. Business revived at tack factory of Dunbar, Hobart, & Co. March. W. E. Trufant of Trufant & Howard, tacks, purchased factory for establishment of new plant. May. Accident to machinery at plant of Commonwealth Shoe & Leather Co. caused temporary shutdown.—Dunbar, Hobart, & Co., tacks, reduced force. July. Factory of Smith & Stoughton Corporation, shoes, sold. October. Commonwealth Shoe & Leather Co. shut down for stock taking. December. Bliss & Co., shoes, removed from Goffstown, N. H., to this place.

Williamsburg. In February, Haydenville Manufacturing Co., brass goods, shut down for inventory and repairs. July. Henry L. James, woollen manufacturer, died, aged 67 years.

williamstown. In March, Williamstown Manufacturing Co., cottons, purchased site for storehouse.

April. Williamstown Manufacturing Co., cottons, began erection August.

Boston Finishing Co., shut down.

www libtool com en

Winchendon. In March Joel Sibley removed woodworking machinery from this place to Gardner. June. Toy and rattan factory of Morton E. Converse & Son destroyed by fire; in October, ran overtime.

Winchester. In January, Stephen Dow & Co. purchased and started up Shaw leather factory. February. John N. Merrill of Merrill Piano Co., died, aged 36 years. May. Stephen Dow & Co., tanners, transferred business from John Maxwell tannery in this place to new tannery in Woburn. --- American Heeling Co. of Brockton, purchased November. Patent granted Arthur E. Whitney site for erection of plant in this town. on hide working cylinder. - Whitney Machinery Co. made improvements in plant. December. Napoleon and G. Goddu received patent on sewing machine.

WOBURN. In February, J. T. Freeman & Co., machinists, introduced new iron glassing tack. March. Rendering works of John Reardon & Sons, soap manufacturers of Cambridge, destroyed by fire. April. G. & E. G. Place & Co., tanners, succeeded by F. W. Perry & Co. - Strike occurred among employés of Wautauga Tanning Co. and shutdown occurred in consequence; 100 persons affected; settled. May. Business of Stephen Dow & Co., tanners, transferred from Winchester to this place. July Russell Counter Co. set up machine for cementing capable of doing work formerly done by twenty girls. - James Skinner & Co., leather, reduced force. - E. C. Cottle & Son, leather, shut down temporarily and Beggs & Cobb, leather, shut down indefinitely. November Timothy F. Hagerty invented device for calling attention to special delivery letters when mailed. - Patent granted to Frank W. Graves on regulating damper for controlling incoming currents of air and to Edward B. Parkhurst on gearing for elevators. - James Skinner & Co. and C. G. Lund & Co. consolidated as James Skinner Leather Co. — E. C. Cottle & Son, leather, added blacking machine and built addition. --- Beggs & Cobb and Stephen Dow & Co., leather, built additions. - Carriage factory of Pollard & Grothe destroyed by fire. December. John P. Crane & Co., leather, shut down indefinitely.

WORCESTER. In January, Globe Corset Co. made additions to plant. ---- Manufacture of specialty in shipping tags established. - Fowler & Co. made arrangements to manufacture adjustable mailing wrapper. --- Factory of Peter Wood Dyeing Co. completed; main building of brick, 50 x 100 feet, two stories. - Peter P. Bradt, patent medicine manufacturer, died, aged 42 years. - Picker room at Hubley Woollen Mill damaged February. Holcomb, Stearns, & Co. established manufacture of artificial flow--Clarendon & Kittredge established manufacture of counters under name of Bay State Counter Co. - Porter & Gardiner, lasts, dissolved; business continued by S. Porter & Co. --- Plans made for erection of machine shop by L. Robbins, 40 x 125 feet, two stories. --- A. E. Barlow granted patent on cop-holder for wire netting machines. --- Anthony-Bates Machine Co. organized to manufacture machines, tools, and implements; capital stock \$20,000. - Jamesville Manufacturing Co., woollens, ran on reduced time. Employés of Walker Ice Co. struck for increase; settled. March. Windle Cycle Co. shut down indefinitely. - G. F. Hutchins granted patent on take-up attachment for looms; Gilbert C. Bemis on pneumatic last; and H. K. Gardiner on machine for trimming ends of shoe lasts. -- Crompton Loom Works produced new style loom for weaving lappet cloths, to be known as "Improved Lappet Loom." --- George L. and William P. Allen granted patent on new form of bleaching keir for use in paper manufacture. --- C. M. Fowler invented a sash lock for windows which allows a window to be opened from one to six inches and securely locked; arrangements made for its manufacture. --- Business of Peter Baker incorporated as Baker Lead Manufacturing Co.; capital stock \$35,000. -Southgate Woollen Co. made improvements in machinery. --- Plans made and contract awarded for new factory building of Norton Emery Wheel Co.; of brick and steel construction, 83 x 233 feet, three stories. --- Plans made by Milton P. Higgins of Washburn Shops, for new factory, 104 x 117 feet, two stories. — C. S. Goddard & Sons, shoes, started up on full time. - Andrew J. Hiscox, proprietor of file works destroyed by fire, leased quarters for re-establishment of business. — Hatch & Barnes, builders' finish, mouldings, etc., leased additional floor space. - David Gessner secured quarters and began manufacture of specialties in woollen machinery, inventions of himself and father. Marcus Mason & Co. of New York, coffee harvesting machinery, established manufacture in this place. --- New factory buildings of Morgan Spring Co. completed and setting up of machinery begun; main building, 100 x 150 feet, two stories. April. Work began on new factory of Wilbur Metal Sign Co.; of wood, two stories, 85 x 70 feet. — New firm,

McKenzie-Howard Co., established manufacture of shoes; machinery formerly used by Wetherell Shoe Co. of Clinton, secured, - Southgate & Co., shoe findings, succeeded by H. A. Tenney. - A new corporation, Baldwin Adjustable Cycle Chain Co., organized and manufacture of adjustable chains established, the invention of E. A. Baldwin of Upton: plant of L. L. Pollard purchased and new machinery added. - Plant of Decker Cycle Co. sold to W. H. Sawyer. - Work on new factory of Norton Emery Wheel Co. begun. - John F. O'Hara of Eureka Manufacturing Co., overgaiters, formerly of J. F. O'Hara & Co., shoes, Lynn, died, aged 31 years. — Quinsigamond works of Washburn & Moen Manufacturing Co., wire, destroyed by fire; work of re-building, with addition of 148 x 234 feet, begun. May. Houghton & Buxton Manufacturing Co. incorporated to manufacture fittings for bicycles and metal specialties. - Logan, Swift, & Brigham Envelope Co. decided to make addition to factory, 45 x 80 feet, three stories. - Crompton Loom Works purchased additional land. ---- Curtis & Marble Machine Co. purchased land for erection of addition to plant, 64 x 230 feet, three stories, --- William R. Albertson, shoe manufacturers' blacking, moved into new factory; of brick, 40 x 70 feet, two stories. -Patents granted as follows: G. F. Hutchins, on reversing mechanism for looms; John F. McCartney, on washout water closet range or latrine; John W. Smith, on governor valve: Louis W. Southgate, on apparatus for handling offset webs: Johan O. E. Trotz, on apparatus for casting ingots; and John D. Warren, on canopy shades for chimneys. - Wheelock Engine Co. decided to erect addition to plant, 24 x 100 feet, one story. -Washburn & Moen Manufacturing Co., wire, voted to increase capital stock from \$3,500,000 to \$4,000,000. — Windle Cycle Co. decided to remove plant to Keene, N. H. Jonathan Munyan, president of Goodyear Shoe Machinery Co., died, aged 73 years. Female stitchers at shoe factory of E. H. Stark & Co. struck for increase; settled. Brewster Cycle Co. organized to manufacture bicycles; capital stock \$500,000. --- Worcester Brewing Co. incorporated; contract let for erection of brewery. - David McTaggart, inventor of a warp compressing machine, invented a varn spooling machine with compressing attachment. --- Draper Machine Tool Co. made plans for erection of addition, 54 x 68 feet, three stories. - Mills of Lakeside Manufacturing Co., woollens, shut down permanently because of loss of water privilege. July. Plunger Elevator Co. incorporated; capital stock \$28,000. - Henry 8. Bacon granted patent on shoe stretcher. - H. M. Witter & Co., cottons, built two-story wooden addition. -E. Reed Co., machinery, made plans for addition to machine shop, 40 x 194 feet. Whittall & Thomas, carpet yarns, shut down temporarily on account of accident to machinery.—Aurin Wood, inventor, died, aged 84 years. August. Wheelock Engine Co. added new machinery .- Work resumed on new factory building of Norton Emery Wheel Co. - Rogers & Young Co. formed to manufacture confectionery; plans made for erection of new building, 70 x 130 feet, three stories. --- Plunger Elevator Co. began manufacturing. - Harrington & Richardson Arms Co. shut down for vacation and repairs. — Albert L. Gilman, carriage and wagon manufacturer, died, aged 48 years. - Factories of Decker Cycle Co. and S. Porter & Co., lasts, damaged by September. Draper Machine Tool Co. started up on full time after shutdown of four weeks .-- Loring Coes & Co., machine knives, ran overtime. -- Robert Ruddy, president of Ruddy Thread Co., died. - Charles Baker of Charles Baker Co., doors, sashes, etc., died, aged 68 years. --- Cotton underwear factory of William H. Burns Co. destroyed by fire; rebuilt. October. Crompton Loom Works received order from Mexico. — Mawhinney Last Co. secured quarters in Brockton for removal of business to that place. — Reliable Manufacturing Co., cotton underwear, removed from Westborough to this place. - Cotton underwear factory of William H. Burns Co. resumed operations. - Plant of Windle Bicycle Co. sold to Frank T. Fowler of Chicago, and started up to manufacture bicycles. ---Charles F. Green, manufacturer of artificial stone, died, November. Thomas F. Hickey invented wool-dabbing appliance for aged 60 years. combing machines. --- Patents issued as follows: To Brown & Simpson Co., on automatic piano; to William H. Redding, on doup heddle for leno weaving; to George H. Scott, on electric rail bond; to William L. Decker, on crank and pedal; to John F. Adams, on chin rest for dental operating chairs; to David Keitcher and C. Weinstein, on combination tool for pipe fitters; to Albert M. Powell, on feed operator and feed stop for metal planing machines; to Henry D. Perky, on machine for reducing and preparing cereals for food; to George W. Bemis, on drum; to Merrill E. Clark, on burnishing machine and machine for finishing stock; and to Joseph P. Doray, on window frame. --- Knowles Loom Works increased force and running time. — F. A. Lapham of Millbury, secured mill in this place for manufacture of cassimeres. — Erection of addition begun at bicycle manufacturing plant of F. T. Fowler; 18 x 44 feet, two stories. - W. C. Young Manufacturing Co.,

238 STATISTICS OF MANUFACTURES. [Pub. Doc. www.libtool.com.cn

machinery, increased space, --- Crompton Loom Works increased force and running time. — Washburn & Moen Manufacturing Co., wire, increased running time. — Powell Planer Co. added new planer built from plans modeled by A. M. Powell, president of company. --- Oliver K. Cook, formerly pump manufacturer, died, aged 80 years. --- Osgood Bradley of Osgood Bradley & Sons, car manufacturers, died, aged 59 years. - Strike occurred among plumbers. December. Patent granted to William Downey on apparatus for tapping pipes or mains. - Samuel Winslow Skate Manufacturing Co. received permit to build addition of brick and stone, 24 x 45 feet, four stories. - Logan, Swift, & Brigham Envelope Co. made plans for new addition, 44 x 70 feet, five stories. - Bemis & Fletcher, manufacturing under name of Waverly Shoe Co., dissolved; business continued by Gilbert C. Bemis under same style. - F. A. Lapham started up Jamesville Woollen Mill. — Thomas Williams, woollens, erected new storehouse. 30 x 60 feet. — Worcester Corset Co. installed electric lighting plant. - Mawhinney Last Co. removed to Brockton. - Frank T. Fowler Cycle Co. incorporated under laws of New Hampshire; capital stock \$100,000; decided to remove to Keene, N. H. --- E. F. Rice, formerly president of Rice & Griffin Manufacturing Co., building material, died, aged 57 years. -_ A . W. W11. cox, inventor of Wilcox organ coupler, died, aged 70 years.

Worthington. In July, A. Stevens & Sons, wooden goods, erected new dam.

Wrentham. In July, Plainville Stock Co., jewelry, shut down; resumed in August.

THE STATE. Returns are made from 196 cities and towns in the foregoing Chronology, as against returns made from 199 cities and towns in 1895. In the following table is presented a summary of the facts shown in the preceding pages placed in comparison with the items contained in the Industrial Chronology for 1895:

Classification of Changes, Suspensions, Fires, etc.		Number of Establishments Re- Porting Specified Changes, Suspensions, Fires, etc.	
	1895	1896	
Firms, establishments, and industries new to towns,	127	140	
Buildings constructed during the year,	181	88	
Machinery added to plants,	211	152	
Other additions to plants,	205	. 76	
Addition of new class of product to manufacture,	14	11	
New industrial corporations organized,	67	41	
Amount of capital stock of new industrial corporations,	\$8,992,900	\$7,865,000	
Rebuilding of burned factories, etc.,	14	14	
Removals to larger quarters,	45	14	
Resumption of business after protracted shutdowns,	65	10	
Use of important new inventions,	4	9	
Changes from private firms to corporations,	1	12	
Changes in firms, firm names, etc.,	94	64	
Changes in character of product,	6	12	
Changes in character of machinery,	1	4	
Changes from hand to machine lasting in Boots and Shoes,	1	6	
Consolidation of firms and corporations,	-	9	
Increases in capital stock,	12	6	
Decreases in capital stock,	2	-	
Removals of firms and industries to Massachusetts from other States,	6	18	
Removals of firms and industries from Massachusetts to other States,	14	7	
Removals from one town to another in Massachusetts,	87	44	
Increase in number of employés.	88	36	
Reduction in number of employés	9	53	
Increase in rate of wages paid	91	1	

