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# WAGES AND HOURS OF LABOR

GREATER SHANGHAI

1929

38

上海特別市

## 工資和工作時間

民國十八年

Compiled by

BUREAU OF SOCIAL AFFAIRS

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上海特別市

# 工資和工作時間

民國十八年

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## 孔 序

歐美各國，自經產業革命以還，人民之散處鄉村恃農耕以自活者，多轉徙於都市；而都市之工作，則以工廠爲其尾閫。廠主挾其資力，賤削工人以自肥，斤斤焉唯減少工資延長時間是務。於是勞資之間，交相嫉視，駭以釀成階級之爭。故今之號稱工業國者，觀其物質之美，生產之繁，未嘗不令人私心嚮往；然社會危機，即潛伏於其中，苟非主其事者，知所以障而挽之，則其隱憂殊未有已也。中國自古重農，比年以來，西力東漸，工業勃興。上海爲百業蒼萃之區，新式工廠，如雨後春筍，勢亦難遏，而罷工之事，亦時有所聞。有識者方揣揣然以爲社會之紛爭將因是而益烈。蔡君正雅，篤學深思，尤致力於勞工統計。近日蒐輯各方調查所得，撰成上海工資與工作時間一書，書中將各工廠工人數目工作時間，工資多寡，羅列比附，至爲賅博，而於工資工時與工人健康工作效能之因果關係，亦能洞見隱微，披抉盡致。中國公私統計，素欠精詳，關於勞工統計，爲有系統之研究者，尤不多觀。此書公之於世，其所以資國人之考鏡者甚多。倘經營工業者，因而知所警惕，恪遵總理利益調和之遺訓，於工人待遇力求優厚，藉以預防社會之衝突增進生產之效能，則此書所爲貢獻，當尤不淺也。適蔡君問序於予，輒抒所懷，以副其請。世之留心斯事者，庶終覽焉。

太谷孔祥熙 十九年十月

## 雷 序

中國正在開始她適應近代工業的工作。這句話說得太短了，太簡了，不能把真相完全表達出來。適應兩字的意義，就是說中國人民的經濟生活，已起了甚深的變動，不僅在經濟生活方面，並且也及於政治生活和社會生活方面，中國已慢慢地捲入近代經濟世界的旋渦中了。

有一般人在想到這件事實的時候，便很容易地發生情感作用。他們稱頌著從前所過的好日子，歷代相傳下來的舊中國。以前的文化、禮儀、社會組織和較舊的觀察點，在他們爲以都很可珍貴，較現在他們所見低賤的和機械化的近代工業，更覺得珍貴些。更可驚異的，便是有不少不是中國人，也這般高談闊論着。我覺得我所相識的中國朋友，卻還不是這般。

更有一般人，很輕率地，熱烈地，談着中國的近代工業化。新的一字，便可辯護一切；近代工業給我們這許多明顯的利益，差不多純是幸福。設或有人因懷疑而攻擊他們，他們就得爭辯着，自信中國很可以借西方工業化的國家爲前車，避去因使用機器而生的弊端，不再蹈較舊的工業政策的錯誤。

可是現在我並沒有意思對中國工業化的利弊，做一番辯論，這問題所包含的分子，太複雜了，決不是短時間所可討論的，並且解析到最後一點，還是靠着各個個人或團體所最先注重的價值。一談到價值方面，辯論就沒有終點了。我個人對於解答這難題的方法，在先立個客觀的標準；照我看來這與主觀的價值，我所引以爲重的，也很能一致。我以爲在中國，這樣的一個客觀測量法，當以民衆的生活程度爲標準。凡是使普通生活程度增高的，就是好生活。我自承我雖不敢自必，但我卻看不出有什麼不能一致的地方來。

西方人民已經解決了工業化中的問題；西方的錯誤，中國可以避免的；這些假定倒很值得注意，西方已經好久對付着農業衰落的問題，在現在更普遍了。凡明白歐美事實的人，沒有個敢斷言分工制度以及與近代工業制度有關的金錢經濟，我們西方人民，已經可以完全應付自如了。我們只有自承近代工業管理，需要較深切的研究，較



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耐心的探討，有出乎我們意料以外的。我們還不能十分確定機器究竟能爲我們做些什麼。我們固然信任機器工業，可是我們如抱着坦白的態度，只能有條件的介紹給中國人。

現在我再回講到中國可以避免西方錯誤的一個假定。固然有許多事實，是很明顯的。小孩子做十二小時工作一天，是不容辯護的，空氣流通光線充足的工廠，對我個人自然覺得勝於黑暗而又不透風的地方，預防着活動機器的意外肇禍，是必不可少的。然而以外還有許多趨勢，是不容易這般評判的。中國自應發現她自己的錯誤，盡她自己的力，去補救改正牠。

無論如何，除了耐心去研究以外，更沒有前進的分法。他人的經驗和歷史的回顧，是重要的，可是決不能替代中國從事工業人民的有意識的考察，或牠的工業生活趨向的精細研究。

這本上海工人工資工作時間報告，可說是研究因近代工業而發生的問題的一個實際嘗試。努力搜求事實而把這些事實述說出來，雖在百年之後，上海仍舊要去尋求這些事實，可是決不能使現在這個研究減少其價值。政策定要從現在可以尋求得到的事實方面決定的，萬不能等待着明天的統計圖表。

這次研究，上海單個團體最大的工人是棉紡業的女工，一九二九年，她們每天做十二小時工作，每天大約得到四角五分的工資。這些女工的每月平均實際收入，約爲十二元五角。這可算是上海工人的模範數字。

男工最大團體是棉紡業，他們每天約做十二小時工作，每月平均實際收入，約爲十五元二角八分。

上面這幾件事實，可以供研究上海工業狀況的參考和比較。

我們又曉得上海工人總數中百分之六十七每小時所得工資少於銀幣一角。

美國有個很早的工業領袖，定了下面幾句標語：

八小時做工，

八小時遊玩，

八小時睡覺，

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一塊錢一天。

這很可以代表將來上海工人的情形，雖則吾們曉得爲現在說。一塊洋錢，還是用銀子鑄成的。

我很希望勞工統計，能隨這本刊物而爲更進一步的運動，在這本刊物的後面，自然有許多學理上和事實上的困難；也只爲了一般能了解這困難的人，纔去嘗試這一類刊物的工作。這個研究，定要和近出的生活費報告同看，方能見到牠們的關係。其他補充研究的材料，也不可少，尤其是一處地方一個工業的詳細研究。事實當然不能即成政策，然而無事實，卻決不能造成公平的政策。

我姑用上面的幾句話，把本刊介紹給研究今日上海工人工資和工作時間的學者們。

雷 穆

上海 十九年十月

## 蘭 序

我讀了這本上海工資和工作時間的稿本，覺得很有趣味我。這幾年在中國，試授社會問題學程，便覺得缺乏統計材料，去說明這些問題。我對於政府各部各局以及私人機關供給可靠統計材料，漸漸地發表出來，心中異常欣慰。從前我們關於許多問題，只得說中國沒有統計數字，現在有幾個問題，對只句話真不適用了。我們確有很少而正在進行不息中的社會經濟統計，其編製都用近代的方法。

中國是塊很大的地方，情形各處不同，所以假使用一處調查得來的材料，去代表全國，那就錯了。我們只能一處一處分開着研究，然後能得到一個全國的概觀。這本書爲了這個緣故，很有價值。

這本書有一個可貴之點，就在工作時間和工人疲勞有直接的關係；工人疲勞，又和職業上的疾病，和工業意外遭遇的事件，相爲因果。很可惜的，這本書並沒有調查到雇用三十人以下的小廠和手工業，那些工人的工作時間一定非常之長，而在上海必不在少數，想將來也定能注意到而細加調查的。

這本書還有一個可貴之點，因爲主要大工業的工資率和工人實際收入數，都調查清楚了。工資或工人的酬報，大概是勞資兩方爭執的最大的原由。工業上所得結果，在資方贏利和勞方工資兩方，究該用個甚麼的比例。這本書對於許多工廠的實際狀況，調查得很清楚，用這些材料，我們在研究生活程度的時候，便可以確定究竟一個工人能否養活他的妻和子女，或竟不能養活他們，而他們自己也要工作，以應付一家的開支。

這本書對於勞資兩方，都有貢獻，因爲在他們自己的廠以外，更可以知道他家的情形。對於研究社會問題的學者，可以把牠當作可靠的材料而引用牠，去證明他的結論。對於將來工資和工作時間的法規，政府立法機關，也當用作參考。

這本書所載的輕薄酬報，自然使我們想到供求律，假使工人少，工資定可增高，同時我們得到一個結論，便是工資的大小，須視技術的高低而後定。一般情形，誠然如此，然而我們又不可忽視其他一點，便是假若工人的需要多，供給少，工人和資方爭執

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地位也就穩固。中國工資低的緣故，大家知道因爲人浮於事，便是低的工資，也很能吸引人口過剩而受壓迫的農民。換言之，人口過剩是工資低的直接原因。我們希望中國工業發展，然而工業發展，決沒有這般快，即可使工人求過於供。至少在較適於工業發展的各國，也沒有過這個現狀。中國現在的工人運動，很可扶助以限制家庭人口爲增高地位的方法，和增進團體要求的能力，並可獎勵設立工業學校，增進技能，以提高他們的經濟地位。

凡喜研究人民生活者，都覺得這本書的有味。這的確是近年來中國進步的特徵，可以欣慰的。這種事實上的真相，用公正之態度和科學方法研究得來的結果——很可以補黨政宣傳的不足，或者更可以校正牠的不及。

蘭培德

上海 十九年十月

## 陳 序

吾國自海通以來，始有商埠，而上海地居富庶，且又控制江海，其繁盛實爲各埠之冠。近二三十年間，舉凡都市一切社會問題，靡不影影入羣，因而推演及於政治問題，良由農村生活艱苦，勞力者漸集於都市，既受生活壓迫，而無業之智識階級利用之以爲工具，城市社會問題，遂益爲繁複，加之清政不綱，吏治腐敗，民國以來，相沿未改，亦使人民生計日絀，社會日趨險惡，此爲由政治波及社會之明驗，足見社會惡化，與政治不良，互爲因果，理無二致。且都市社會之多數份子，厥維勞工，故今之所謂勞工問題，在各種社會問題中，實佔重要位置，而勞工問題之樞機，不外生活二字，蓋生活問題，或「民生」問題，乃勞工問題及各個社會問題之中心也。我國幅員廣大，人民衆多，風俗習慣各處不同，生活標準究以何者最爲適當，即社會科學專家，一時亦未易置答，欲求精密之歸納，貴有確實之數字以表現之。大致一地方或一商埠之民衆生活，每因職業不同，而有若干差異。茲就工人言之，如上海一埠，現有工業種類，工廠數目，及勞工人數，作工時間，工資平均等項，均爲研究勞工問題及改善勞工生活所不可缺少之基本材料。蔡君正雅，學有專長，就上海市社會局調查或訪問之所得，加以銳利之研究，精細之分析，懇切之說明，纂成「工資和工作時間」一書。其中關於工業種類者：爲鋸木、翻砂、機器、造船、玻璃、製皂、火柴、搪瓷、繅絲、棉紡、絲織、棉織、針織、漂染、製革、麵粉、榨油、製蛋、煙草、造紙、印刷各業，計二十一種，此二十一業之工廠，共有二千三百二十六所，使用工人二十八萬五千七百人，對於各工業中男女工人乃至童工之平均工作時間，及工人每月所得平均工資，均列有種種統計比較表，俾讀者可用最經濟的時間，了解上海工人之工作報酬以及生活概況，非特留心勞工及社會問題者應人手一編，並可供勞工行政之參考，我國夙以農立國，人煙稠密，農作單位太小，非將一部份農人次第工業化，不足以吸收農村過賸之人口，而促進農人生活之改良；但欲使集於都市之勞工及其家庭，不致變爲貧民窟，又非盡量提高勞工之生活程度不爲功。工人工作時間之長短，及所得工資之厚薄，關係勞工之幸福及勞工家庭之生活標準，至大且巨。且工人生活安定，工潮既可減少，生產亦可增加，社會與政治，始有健

## 工 資 和 工 作 時 間

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全的基礎，國勢亦蒸蒸日上，勞工統計關係之重要，有如此者。蔡君此作，誠能扼其綱要，可作國內大小都市編製勞工統計者他山之助，不獨為學者几案間研討參考之資料已也。

陳長蘅

立法院 十九年九月

## 陳 序

處茲舉世日趨工業化之時代，欲保持社會秩序之安定，使糾紛得以減免，產業日就發揚，則首宜注意者，厥為勞資糾紛。在昔吾華，雖以農立國，無所謂勞工問題，但年來因潮流所趨，新式工業，逐漸興起，情勢既與前不同，勞資爭議，亦遂暗長潛滋，如帶雨春潮，浸見急迫。此固為將行工業化時所應有之現象，要係社會上之一種病癥，亦即工業本身生死存亡之一大關鍵。苟不善為處置，匪特勞資雙方同受其害，循至國家亦將蒙重大影響。順應之道，在各國雖因環境關係，所採方略，各有不同，究其扼要之點，當不外著意於保護勞工為工人謀福利，而於工時工資，尤宜為適宜之分配，俾生活得以安定。惟是凡事積重難返，況為雙方利害所關，益此則損彼，驟然改革，在資本家既狃於常習，不欲輕棄固有之利益，在勞動界，復矯枉過正，常有逾分要求，則調解者，若不依科學為排難理紛之標準，每難使當事者諒解，消弭爭端，甚或遷延不決，演成重大之問題。此罷工糾紛失業諸統計工資工時指數，以及物價家計調查等等編製，所以不容或緩者也。第我國統計事業，甫在萌芽，益以種種關係，舉辦至為不易，矧勞工統計之編製，因實業方面之不能協力，勞工方面之缺乏組織，尤感困難。而吾友蔡君正雅能不避艱阻，實事求是，前既蒐集滬埠年來罷工糾紛及工人實際收入等情形，撰述專書，為當今社會鉅大之貢獻，近復更進一步將工資工時編輯付印，對於勞工生活狀況，能在極複雜繁難之中，用科學方法，將其實在情形，明白表現，俾世之覽者，瞭然於個中癥結之所在，其貢獻於社會之鉅，不言可喻也。考各國經濟史乘，凡屬工業化之國家，其初步工業，每以紡織發端，良以工人不需特別技能，但於短時間中，加以訓練，便能從事工作，上海工人數，以紡織業為特多，足見工業化之程度，已由萌芽而達初步之滋長，端倪既啓，自有發達之可能。西方國家工業化所發生之種種難決問題，使社會呈不安現象者，我國能否先期防微杜漸，不蹈其覆轍，要視此時期中之勞工設施為何如。是書對於工資與工時分析，至為詳審；對於工人之實際收入與季節變動之研究，尤能運以精思，盡統計方法之能事。庶今後勞資各方，與夫從事於改良勞工之待遇者，有所憑藉，共同努力以促進我國之工業，斯又不獨上海一隅工人之福音已也。

陳華寅 立法院統計處

民國十九年十月

## 蔡 序

吾國的勞工的問題——尤其是上海——應經一番精密的調查，把確實的條件披露出來，這是不消細說的。中外人士，都說吾國有發展工業的必要。無論現有工業，幼稚到怎樣程度，除非傾向於共產者之外，決沒有人肯任他摧殘。而研究勞工狀況，在關心吾國社會問題者的眼光中看來，其重要也復相等。他們的人數，他們的貧乏，他們智識上的缺乏，他們所受的困苦，是值得引起社會人士的注意的。勞工和資本，兩者都是發展一個國家的要件，兩者各有他們所應享的權利，為一國的當局，所不容忽視的。怎樣能公平地待遇雙方使他們能誠意地合作，真是現代最難解決的一個問題。

須知社會經濟學者，不應該做個慈善家。他的工作，是科學的。他該收集條件，觀察，紀錄，並將所得到客觀的結果，披露於公眾之前。人力控制自然界，在今日已告成功的，尚難敵過社會控制力範圍之大，而非社會改革家所能夢想得到的，天然界的控制，既有賴於數學和試驗的方法，故社會的控制，不依科學的和有系統的方法去調查、觀察、和紀錄事實，也不過僅等空言而已。

上海是個世界大埠，其重要不僅是為工商業的中心點，也是東西新舊態度習慣意見和觀察的交雜點，很複雜地組織成個極大的經濟社會。其中有很守舊的，有很激烈的，有極端的資本家，也有極端的社會家。這些人物，正可以代表一般的趨勢和運動，為我人能力上所不能抑制的，而也可以用最好的方法，引導他們到一條平安而較不爆發的路上去。

以上海工業問題範圍的擴大，組織的複雜，吾們不能對於已往的工作，自慶自賀，假使這草創的勞工統計，是沒有重大錯誤的。吾們不必再將種種工作，複述一遍。吾們所要簡單地說明的，便是這種工作，是在三年前本市市政府前農工商局設立的時候，便開始的，在三年中間，吾們對於這種工作，已有確定的主張和計劃，這種計劃所研究的範圍：有本市勞工概況調查以及失業，工資和工作時間，生活程度，零售物價，工會，罷工停業，勞資糾紛，勞動協約，工業災害，勞工設施，法令等等。這種工作的成功，全



## 工資和工作時間

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靠兩大要素：(一)可用的經濟能力，(二)經過訓練而有能力的人員。而更重要的原因，更在公衆的獎借和同人對於工作上的興趣。吾們在此處不能不感謝國內外專家，如南開大學社會經濟研究委員會何廉博士，清華大學陳達教授，立法院統計處劉大鈞處長，前南京財政局金國寶局長，美國勞工部統計局史蒂華局長，國際勞工局多瑪局長等等，不斷的建議和獎飾。吾們尤其應當感謝的，是美國密西根大學教授中國國際經濟關係研究會主席雷穆 (Prof. C. F. Remer)，約翰大學教授沙乃文 (Prof. P. B. Sullivan) 羅道納 (Prof. D. Roberts)，北平社會調查所陶孟和先生，陳達教授，金國寶局長，又將全稿校閱一遍，給我們許多切要的意見，本局同人中如毛起鵠費昌華丁同力諸先生從計劃調查工作起一直到本書出版之日止，很費一番心力，本市各工廠能夠盡量的供給材料，以及本局調查和計算人員的努力，對於本書幫忙不少，都是不可忘却的。

蔡正雅

上海 十九年七月

上海特別市

# 工資和工作時間

民國十八年

## 第一編

### 工資與工作時間統計編製法

#### 第一章 工資統計類別

##### 第一節 工資率與工人實際收入

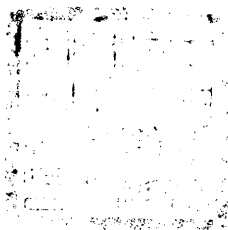
**工資問題之重要** 工資在僱主眼光中，不過是生產費用中之一部分，在勞工眼光中，却要是維持生活的必需品。僱主和勞工對於工資的觀察點，既然各有不同，所以應付工資問題的手段，亦即各異。僱主之於工資，即使不能隨意的核減，亦不能時常有所增加，而勞工爲着生活起見，却常常提出關於工資的種種要求，要求之目的不遂，勞資糾紛，隨即發生。所以工資問題，是一個很值得研究的問題。統計方法，是一種最適當的最公允的研究方法。

**工資率與工人實際收入之區別** 然而統計方法，不僅一種<sup>註一</sup>。要而言之，有下列兩者：

- 一. 工資率統計
- 二. 工人實際收入統計

這兩種工資統計的編製法，固然不甚相同，即其目的，亦復各異。茲分別說明於後：

註一 International Labor Office: Methods of Statistics of Wages and Hours of Labor, pp. 7, 11 and 12.



工資率統計，是根據每個工人在一個固定的時期內應得的額定的工資數編製的。工人實際收入統計，是於額定的工資數之外，還要加入膳費、宿費、升工、賞工、分紅、年底加薪、米貼、或其他種種額外進款，並且要把那些因請假而扣除的工資或因損壞機件、出品惡劣等等數目而罰扣的工資剔除之後，編製而成的統計。

**工資率與工人實際收入統計的目的** 工資率統計的主要目的，在預算生產成本，這個統計，對於僱主用處極大。有了這個統計，他可以在事先知道什麼一種工作時間和什麼一種工資數量，不使他將來所得的利潤有所減損，才可以把勞工的工作效率提高。工人實際收入統計的一個重要目的，在測量工人實際生活。勞動者日常實際生活，並不只靠額定的工資率，還有上面所說的那些種種額外進款。所以僅有工資率統計，尚不足以資研究工人的生活狀況，非另外編製工人實際收入統計不可。假使舉辦工資統計者，欲藉統計的結果，做調解勞資爭議的標準，工資率未始不可適用，因為當着糾紛發生的時候，關於工資的爭執，往往不是實際收入而是工資率；但是這個辦法，似尚失之公允，即使工人對於額外收入隱瞞不報，而調解的人却不可以不切實調查清楚，究竟工人實際所得能否維持其日常生活，究竟工人對於僱主之增加工資或減少工作時間的要求，是否合理，有了這種根據之後，勞工的要求，似乎有了範圍，僱主對於勞工的態度，亦當可予以相當的諒解。因此，工人實際收入統計，是調解勞資爭議之合宜的資料。

**所謂工資總額統計實為工人實際收入統計之一種** 除掉這兩種統計之外，尚有所謂工資總額統計<sup>註一</sup>。其目的在研究一個社會中所有勞動階級實際總收入情形，用以觀察勞動階級在國民經濟分配上占有一種什麼樣的地位的。但是就編製方法說，則工資總額和實際收入，並無多大分別，不過工資總額的內容，比工人實際收入多一些事物，就是除掉工資之外，還有薪金利息等等加入在內的。因此工資總額，不必另成一類。

**計時工資率與計件工資率之分別** 工資率的主要形式有二<sup>註二</sup>：（1）計時工資

註一 同上 p. 12.

註二 同上 pp. 8, 9 and 11.

率，(2)計件工資率。前者以工作時間為計算工資的標準，後者以出品的單位為計算工資的標準，但是兩者關係，仍舊是不可忽視的。因為計件工資率的標準，還是依照計時工資規定的，不過在計時的標準之下，在同一時期之內，各個勞動者如果職務相同，則所得的工資有相同的可能；而在計件的標準之下，雖在同一時期之內，各個勞動者所得之工資，未必即能相等，技能之高低，工作之勤惰，體力之強弱和生產用具之優劣，在在足以影響其所得。

工人實際收入，也有計時和計件兩種形式。工人實際收入，內中包含事物，較之工資率為多。因此，不但計時和計件工人實際收入不相等，即計時與計件工人之間，亦復有顯著的差別。這也是一個很可注意的事情。

**工資率與工人實際收入統計工作之難易** 就編製工作之難易說，則工資率與工人實際收入，各有其便易和艱難之處。計時工資率之編製工作比較簡單。計件工資率，既不能用以和計時工資率及實際收入比較，也不能用以和過去時間內的同一計件工資率比較，除非能夠把各個計件工人所做各個單位的生產品，所費的勞動時間，一一查清，化成計時單位之後才好應用。至於如何將計件單位化成計時單位，後面當再說明。工人實際收入，雖然可以避免計件工資的麻煩，但因實際收入的內容比較繁雜，如升工、賞工、獎金、分紅、罰金等等要同時查明，亦非易事，還有關於計算和編製工作上的困難問題。讀者請閱第二章，這裏也不多說了。

**工人實際收入之變動與工資率之變動有別** 工人實際收入變動，似乎與工資率之變動，有密切的關係<sup>註一</sup>。這當然是無從否認的事實。但是工資率之變動，比較工人實際收入究竟平穩多多，因為工人工資之增加或減少，不是勞資任何一方可以隨時隨意做到的，必須經過雙方協議的手續之後才有成效；工人實際收入，則不僅隨着季節變化而變動，他如獎金和分紅之發給、以及工作時數之增減和工作日數之多寡等等，都有影響。（參閱第三篇工人實際收入統計）

註一 同上 pp. 10 and 11.

National Industrial Conference Board: Wages in United States, 1914-1927, Chap. 1.

National Industrial Conference Board: Wages in United States, 1928, Introduction.

究竟編製工資率統計好，還是編製工人實際收入統計好呢？這要看編製者的目的如何而後決定。如果舉辦的目的，在研究生產成本預算，就應當採用工資率統計，如果目的在測量工人的生活，就應當採用工人實際收入統計。

## 第二節 工資統計試辦之經過

**舉辦工資統計之目的及其所遇之困難** 上海特別市社會局，是一個社會事業服務機關。調解勞資糾紛和改良勞工生活狀況，固然是它的職責，而發展實業，亦是一個重要的任務。要明瞭勞工實際生活狀況和實業界情形，非從調查和統計入手不可。在開始舉辦工資統計的時候，曾經費了兩三個月的光陰，作為籌備編製的時期。當時將工資率及工人實際收入兩種統計，在理論上以及實際工作上各方面仔細的考慮一番，同時又將兩種統計應得的材料試行搜集一下。其中最感困難的，便是計件工人的工資率材料。國內廠家，對於計件工人的每人每月出件數和每人每日工作時數，大都沒有準確可靠之記載，而調查時乃大感困難。譬如絲織業工人織一疋綢，並不限定若干日數織完，只要織就之後，就依每疋額定的工資數發給工資，技能高以及工作勤的工人，當然比較的織得迅速，因此，一天內各個工人究竟織了幾尺或幾丈綢，廠內沒有詳細的記載。又如煙草業之包煙工人，一日工作，忽作忽輟，忽多忽少，悉隨其意。又如火柴業之籌工，工資以籌計，廠方認籌不認人，一籌可以由數個女工認領，而工資却以一籌為準。因此，連實際工作人數，也不易查明。在廠方未真正明瞭調查工資的用意之先，欲使廠方將計件工人工資工作單位和工作時數分別紀錄清楚，事實上尚難辦到。但是計時工人的工資和工作時間，比較穩固一些，所以調查起來，也比較容易一些。計件工資率，調查既如此困難，只得先將工人實際收入統計舉辦起來。並且這種工人實際收入統計調查方法，比較的簡單，除令廠方按月報告確實工人數工資總數及分別男女童工資獎金等項外別無他事，廠方尚不致感覺到過分的麻煩。十七年工人實際收入調查的結果，已編成上海特別市工資指數之試編一書。所有關於逐月實際收入編製經過情形、困難、解決辦法和編製方法等等，均有詳細之記載，讀者可隨時參閱。十八年工人實際收入統計，仍舊依照十七年的辦法辦理，其結果刊載本

書第三編內。一俟上海市工人生活費指數完成之後，即可着手編製上海市真工資指數(real wage index)，將來調解勞資糾紛，改良勞工生活狀況，均得有所依據。這就是舉辦工人實際收入統計的用意。

**工資率統計之試編** 上海市工資率及工作時間統計的第一次舉辦時期，是在十八年九月。但是在這個時候以前，未始沒有舉辦的決心，祇因計件工人工資率，不易搜集準確的材料，必待經過長時期訓練之後，廠方才肯予以贊助。這次工資率調查，不但分開業別，性別和年齡別，並且還要將工人的職務分開，按照工人工作號碼或姓名抄錄，所以比工人實際收入統計要詳盡一些。但是因為過於詳盡，反使一部分廠家不肯贊助。因此，平時調查工人實際收入凡三十業，而這次調查工資率，只限二十一業。這似乎是一點遺憾，然而統計的價值並不在調查範圍之廣闊，而在材料搜集之審慎和編製方法之精密。這次工資率調查，自信對於這幾點已經有了十二分的努力，不過事實上結果仍有不盡滿意之處。我們也特別的提出來，希望將來有改善的方法。

**工人實際收入統計逐月編製之理由** 我們於逐月舉辦工人實際收入統計之外，每年並辦工資率統計一次。讀者或病其工作過分繁雜，以為兩種統計不必同時舉辦，任何一種，只要一年舉辦一次或兩次已足。但是統計這件事情，辦理次數愈多，愈有進步，除非因為財力不敷或他種關係，不得已只好把辦理的次數減少些。工人實際收入之逐月調查最大的好處，即在訓練廠方能夠幫助我們調查，供給必需的材料。從前廠方因不明調查用意，多方推諉。後來再三派員說明，並且逐月不停地去調查，又常常提出種種問題和他們討論是否不背事實，常常修正調查表格，求其實用。因為繼續不斷地訓練的關係，現在各廠除少數固執不明事理者外，確然能夠改變他們的懷疑的態度，並且熱心贊助調查。像這次添辦的工資率統計，計件工資竟然可以搜到些相當的材料，這未始不是逐月調查逐月訓練的功效。工人實際收入統計和工資率統計的內容、性質、和目的迥不相同，要研究工人實際生活狀況和明瞭實業界情形，兩種統計非同時舉辦不可。不過我們所有關於這兩種統計的材料，並不十分豐富，我們的工作依舊不過是一種試驗的性質。

## 第二章 工資統計之取材

### 第一節 取材範圍

**區域範圍** 查本市行政區域，包括三十個市鄉和一個特別區<sup>註一</sup>。在這三十個市鄉中，有十七市鄉已由市政府正式接受。在黃浦江東岸的，有陸行、楊思、洋涇、塘橋、高行和高橋等六區，在黃浦江西岸的，有滬南、閘北、江灣、吳淞、殷行、引翔、法華、蒲淞、真如、漕涇、彭浦等十一區。特別區包括法租界和公共租界。凡在上述各區內設立的工廠，均在調查範圍之列。其中滬南、閘北、江灣、引翔、洋涇以及特別區，尤為本市工廠薈萃之所，所以調查的時候特別注意。

**重要工業之選擇** 市內製造工業，種類繁多，逐一調查，窒礙殊多，所以不得已以少數重要工業為限，所謂重要工業，係指一業中工廠規模較大和工人數較多者而言。一業工人數，如果能夠超過一千五百人以上，則此業似可稱為重要工業（這也是一種假設，是否妥當尙待斟酌）。工人實際收入統計所選者，凡三十業，工資率統計所選者，凡二十一業。在選定各業中，間有不能超過一千五百人者，這是各該業特有的情形，而無可諱言的。工人實際收入調查，祇抄錄總數，雖然分開業別、性別和年齡別以及獎金、分紅、應扣工資等項，但不及工資率調查手續之繁，因為工資率調查，不但分開業別、性別、和年齡別，並且還要區別職務，所抄工賬，不是總數，而是各個工人的額定工資數。廠家覺得工資率調查過分詳細，寧可按月供給工人實際收入材料，不願允許我們抄錄一日的工資率。所以調查的結果，工資率統計，只有二十一業的材料，較諸工人實際收入統計尚少九業。像電機業外廠較多，我們雖已將本國工廠的材料得到，而實際抄來人數遠在全業人數三分之一以下。又如愛迪生電泡廠為了這個問題，本局往返磋商，不知經過若干時日，仍舊一無結果。又像電氣業工廠，本市除本國工廠數家外，當以公共租界電氣廠家的規模為最大，其次為法租界電氣廠。此次調查，雖再三接洽，終於置之不理。就重要程度論，則電機電氣兩業，在本市內不能不算是極重

註一 上海特別市政府祕書處：市政概況，第四頁 民國十七年

要的工業了，但是事實上，雖費盡心力而材料終不能得，也只好從闕了。又如棉紡業，我們已抄到十九個工廠的工資率，然外籍廠家，關於實際收入材料，以前尚源源而來，對於此次調查，竟完全拒絕。

**工廠工人之採用** 工資調查，並不定要限於工廠工人，非工廠工人工資，也應當調查。此種非工廠工人，工作既無定所，變動亦即無常。在全市總工人調查未進行之前，我們只好先從比較容易得到材料的工廠工人方面着手，因為他們畢竟有固定的工作場所，又有工資賬簿可資依據。然所謂工廠工人，係指直接參與製造工作的勞動者而言，廠內雇用的事務人員、專門技術人員和雜役等等，當然剔除，所以我們的工資調查，不僅以市內重要工業標準工廠為範圍，而尤以直接參與製造工作的工廠工人為限度。

## 第二節 取材方法

**工資統計材料來源** 調查的範圍既明，現在便可談到調查方法，工資統計，不僅可以從工廠的工資簿內取材，下列各種資料，亦大可依據<sup>註一</sup>。(1)勞動協約，(2)勞資爭議調解仲裁決定書，(3)職業介紹所的報告，(4)疾病及意外災害保險公司的報告，(5)勞工團體關於工資的記載，和(6)其他。吾國現在尚無職業介紹所，和疾病及意外災害保險公司之組織。上海市勞動協約統計，尚未舉辦。勞資爭議調解仲裁決定書<sup>註二</sup>中，雖亦有關於工資問題者，然僅以發生勞資爭議的廠家為限，實際祇可當作參考研究的資料。工會組織，較昔已屬發達，然工會人員的興趣，似乎不在設法使他們的組織健全，工會並不能供給任何材料，所以我們祇能夠從工廠內搜集材料。工廠工資簿，不論記賬方法之優劣，究不失為一種記載。如果和廠方接洽得好，讓調查人員親為抄錄工資細賬，其材料之準確，又豈他種來源所可及？

**標準取樣法之採取** 既然用直接調查法，則所需調查人員和調查費用較多。要將本市各業所有工廠工資，同時調查清楚，當然是不可能的。因此，我們不得不採取取樣法。在上海特別市工資指數之試編一書內曾經把取樣法介紹過。取樣法有三種：

註一 International Labor Office: Methods of Wages and Hours of Labor, pp. 12, 13, and 14.

註二 上海特別市社會局: 罷工停業統計及勞資糾紛統計 民國十八年 商務書館



第一種叫做無限取樣法，就是把所有材料，盡量的搜集，但是往往把不易搜集的材料放棄了，這就是牠的缺點，第二種叫做標準取樣法。就是從全部材料內，選出若干合於預定的某種標準者，作為代表，這個方法的毛病，在專憑主觀的見解。所謂標準，更容易流入武斷之一途。第三種叫做任意取樣法。就是從全體事實內毫不參加個人的私見，選擇若干材料作為代表。這個方法的弊病，就在任意所選的結果或者祇限於事實之一部分，或者祇限於容易搜集的材料。我們的工人實際收入調查，是按月舉行，我們的工資率調查，打算一年舉辦一次。這兩個統計，既然都是定期的，當然以標準取樣法為最合應用。所選材料不在詳盡，但求足夠代表普通一般情形為已足。被選入調查的廠家，未必即是一業中規模特別宏大的工廠，凡祇具有手工業規模的而人數不滿三十人的工廠，則不在調查之列。但是事實上不能不有例外，在可能範圍以內，務以能達到該業人數三分之一為度，庶幾可以代表該業普通一般情形。更有好幾業廠數不多而規模尚不為小，工人人數亦不算少，所以我們便把所有廠數一齊調查，其結果當更屬可靠，而於規定標準無損。此種標準工廠選定後，按期調查，不使有所更動。即使遇着倒閉情事，亦必尋一個規模相當的工廠替代。

**計件工資合成計時工資之方法** 工資調查最困難的一點，在計件工人的每日出件數和每人每日工作時數之無可靠的記載。這話在前面已經說過，要解決這個困難，祇有一個法子，就是事先同廠方約好，叮囑他們將調查日期（九月二十五日）所有計件工人的每日出件數、計件單位、每件額定工資數、每人所得工資數、以及每人工作時數分別查清，然後將每人當日所出件數乘以每件額定工資數，再除以各人工作時數，即得每人每小時的工資率。其中計件單位及每件額定工資數兩項，廠方尚可設法查考，對於每日出件數，及每人工作時數，則不得不委派各部各職頭目幫同事務人員嚴密審查，隨時紀錄下來，由本局調查人員帶局應用。這個辦法，實在十分麻煩，廠方居然能夠替我們做到，誠可感激。所苦者，本局調查人員太少，假使把這個繁雜的記載工作，讓我們自己去做，其結果必更可靠，因為事實上尚有少數廠家，做得不甚精密，我們仍舊免不了有點懷疑。所以計算各職平均工資率時，我們特地將計件和計時分開，將來計件工資率，即使發現疑點，可不致影響及於計時工資率。但是究竟這次所擬的計件

工資化成計時工資的辦法，有無弊病，現在尚無從斷定，必待十九年九月第二次工資率調查之後方可明瞭。

· **工資調查時期問題和工資率調查採用九月二十五日之理由** 最後再把關於選擇調查工資的時期一個問題，討論一下。工資率調查，既然預備每年舉辦一次，則調查時期，大有研究的價值。查閱兩年來工人實際收入統計，知道四月五月九月和十月四個月的收入變動情形，比較起來，最稱適中。天氣溫和，當然是一個最重要的原因。所以調查時期，遂決定在九月十月之間選擇。本擬想從九月二十日起，逐日調查兩個星期或一個星期的工資率，但是事實上因為經費和調查人員不敷，不能做到。九十兩月既然是一個適當時期，則在這幾十天之內，任何一天的工賬，均可以取作工資率統計之材料。於是又擇定本年九月二十五日為調查時期。調查時期決定之後，即辦理接洽調查手續，一再函請各廠將九月二十五日工賬特別仔細記錄，各部各職各種工人的工資率和當日工作時數要有準確的查考，尤其是計件工人的出件數和工作時數，不可有絲毫錯誤。有了這固定的限期之後，各廠對於記賬，不致一再遷延，調查人員到工廠時，即可將賬簿取出，隨手抄錄。其因特別關係而未能準期辦理者，亦得准許通融二三日，藉資補救。譬如火柴廠家和製皂廠家，有一部分工作遇着天雨停止工作。十八年九月二十五日却巧是天雨的日子，當然要改調一日。這種辦法，和美國勞工統計局之以每年五月十五日為調查工資時期的辦法相似<sup>註一</sup>。戶口清查，貴在時期縮短，愈短則人口變動愈小。工資率變動，當然沒有人口變動之速，但在一日之內調查，却可以免去各人調動職務的弊病，無論何業，一個工人兼做數種職務的情事，在所不免，職務變動，在一日之間，究比一星期或十日以上的時期為少。以上就是我們擇定九月二十五日為調查工資率的時期的理由。

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註一 United States Bureau of Labor Statistics: Bulletin, No. 286.

### 第三章 工人總數之調查

#### 第一節 工人總數調查之重要

**工人總數調查之必要及其困難** 在舉辦工資統計之先，有一個重要的工作，不能不首先完成的。這個工作，就是一地方的工人總數調查。究竟那幾業的工人最多，那幾業的工人較少？男工女工及童工人數之分配若何？計時工人和計件工人人數之分配若何？工廠工人占全體總人數百分之幾？非工廠工人占全體總人數百分之幾？在一地方內，那個區域某種工業工人最多？這種種問題，非經過實地調查，不能回答。工資統計的價值，不在乎範圍的廣闊，而在所調查的材料，能否代表各業情形和統計結果是否精確。如果事先沒有普遍的工人總數調查，則統計的結果，恐怕有不足以代表實際情形之嫌，但是這種普遍的調查，却是件不容易舉辦的工作。其艱難程度，雖戶口清查，亦所不及，清查戶口，是挨門逐戶進行，工人總數調查，却要辨別何者為工人，何者為非工人。可是工人總數調查，所採取的原則，頗有與戶口清查相似之處：第一，調查時期要短，過長則因工人移動而發生的弊病將無從補救。例如碼頭工人和泥水木匠，工作無定所，也無定時，調查時期不能不縮短。第二，調查人員要多，過少則調查時期勢必延長。第三，調查費用要充足，事業方不致中斷。上海市工人總數調查計劃，早已擬就，祇因調查費用無着，至今尚未能見諸事實。不過在此種調查未實行以前，我們的事業仍不能停頓，不得已乃從估計方法入手。十七年五月，我們曾查到 1,504 廠，237,522 人<sup>註一</sup>。我們的工人實際收入統計材料，就是從這 1,504 家內選出若干工廠，各業所取人數，務求能達到該業人數三分之一的規定。嗣後逐月調查，對於此種已選定之標準廠家，不使有所更動，如遇停閉情事，則必設法以規模人數相當的廠來替代。這次調查時期，有一個多月，雖然是實地調查而不能完全當做估計看待；但是因為當時頗注意一般規模較大的工廠，許多規模較小的小工廠未能一律列入，所以統計結果，未可認為準確。在十七年編印的上海特別市工資指數之試編一書內，只披露一個總數，而未曾將各業工

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人數分配情形詳細的發表出來，讀者從這個統計內祇可以得到約略的印象而已。十八年全市工人概況調查，仍舊未能實現，我們添辦的工資率統計，又亟待進行。因此，在十八年八月間，又復將本市工廠工人數調查一番。這次調查的結果，雖然自信比從前較好，但有不少廠家，因為財力的不足，和調查人員的缺少，不得不用估計方法替代，計調查二十一業，實得工廠 1,584 家，實得工人 244,288 人，然如合併估計數計算，則二十一業有 2,326 廠，285,700 人。

## 第二節 工人數的調查及估計方法

**工人總數的確定** 此次工人總數的確定，以調查為主，估計為輔，現在把調查和估計的方法說一說：

一． 有同業公會的廠家，先到公會內索取同業工廠名單，依照廠址逐一調查，不入公會的廠家，如果規模較大，調查尚易，如果規模極小，即使挨門逐戶的尋覓，而遺漏在所難免。此等規模極小之廠家，唯有先從資方公會勞方工會以及其他方面詢問到一個約略的廠家數，各廠平均工人數，男工女工及童工所占百分數，然後再與實得廠數及實得工人數合併計算而得一業總人數，製皂業、繅絲業、棉紡業、絲織業、棉織業、針織業、漂染業、煙草業等工人總數，就是用這個方法總計的。

二． 沒有同業公會的廠家，則分區派員調查，規模較大的廠家，既為一般人所共知，調查當然不會遺漏，規模極小的廠家，也只好用估計的方法去推算。估計方法，是根據廠方或勞方的猜測，翻砂業、機器業、玻璃業、製革業、印刷業等工人總數，就是用這個方法得來的。

三． 然亦有極易調查之廠家，牠們的規模大概相仿，而廠數亦寥寥可數，祇須費一番接洽的工夫，材料差不多就可以得到的。鋸木業、造船業、火柴業、搪瓷業、麵粉業、榨油業、製蛋業、造紙業等工人總數，就是用這個方法求得的。

在本章內祇能說明工人數調查之重要及總計方法，至於各業工廠工人詳細分配情形，悉載第二編第一章。

## 第四章 業務分類及職務分類

### 第一節 業務分類

**分類之不易** 工資統計，和其他勞工統計一樣，所有材料，應當依照業務分類和職務分類，才可以明白各業各職工人工資的個別情形。但是我們在初辦工人實際收入統計的時候，因為人力和財力的關係，尚難澈底明瞭各業各廠各職內部工作的詳細情形，所以祇能依照業務性質、工資等級或工作情形，暫時將調查所得的三十重要工業，分做五門<sup>註一</sup>。

- 一. 紡織工業門 縲絲、棉紡、絲織、棉織、針織、毛織。
- 二. 化學工業門 造紙、皂燭、火柴、油漆、製革、玻璃、搪瓷、化妝品、漂染。
- 三. 機器工業門 機器、電機、翻砂、造船、水泥、磚瓦、鋸木。
- 四. 食品工業門 麵粉、榨油、製蛋、調味罐頭、冷飲食品、煙草。
- 五. 水電印刷門 自來水、電氣、印刷。

這種分類，似尚不甚妥善。因此，在本年工資率調查未舉辦之前，即先從解決業務分類問題入手。查國際勞工局所擬定的業務分類法，尚稱周密，並且和各國分類法又大致符合，所以我們決計採用。

**國際勞工局的工業分類的原則** 國際勞工局對於工業分類以為有三個原則可以依據：(1) 所用的原料，(2) 製造的程序，和 (3) 製造品的性質。據國際勞工局研究，在初期製造時代，主要的原料，大都祇有一種，所以各自可以成為一類。在後期製造時代，一個製造品，大都要併合了各種原料和經過了繁複的程序才可製成，所以那時製造的程序和製造的性質，就成為重要的分類材料。但是這三種原則，仍舊不是主要的而是次要的。工業組織之不同，才是各業的根本區別的所在。因為工業組織之不同，這一業各廠號和工人的性質，才和那一業各廠號和工人的性質不同。如要確定一種業務的類別，不僅要根據原料程序和製造品，一定要看工業的組織性質如何而後可

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定<sup>註一</sup>。

**國際勞工局的業務分類法** 國際勞工局根據工業組織這一個標準，擬就下列業務分類法：

(A) 初級生產門

(I) 農業類 凡墾殖、畜牧、漁業、園藝、林業等屬此類。

(II) 礦業類 凡礦物之開採屬此類，但提鍊金屬則不在此例。

(B) 次級生產門

(III) 製造工業類

(1) 木材製造目 凡木材器物之製造屬此目，但傢具及交通用具不在此例。

(2) 傢具製造目 凡傢具之製造，不論木材或金屬等，均屬此目。

(3) 冶鍊工業目 (甲) 金屬製造之初步手續，如鋼鐵之鑄鑄，及非貴金屬之鍛鍊，(乙) 翻砂及其他次級製造屬此目。

(4) 機械及金屬製品目 凡各種機械及金屬製品，如電機、農具、器皿、用具之製造，屬此目，但金屬製造之交通用具、樂器、鐘表以及貴金屬製品等，不在此例。

(5) 交通用具目 凡交通或運輸用具之製造，如船隻、車輛、飛機等屬此目。

(6) 土石製造目 凡土石器物之製造，如玻璃、水泥、磚瓦、瓷器、陶器等屬此目。

(7) 建築工程目 凡房屋、道路、鐵道、橋梁、河道等建築或修理工程屬此目，水電工程也併入此目。

(8) 動力工業目 凡瓦斯、電氣之製造，水力及自來水之供給，屬此目。

(9) 化學工業目 凡化學藥品、化學工藝品之製造，如肥皂、油漆、肥料、防腐劑、顏料、炸藥、火柴等，屬此目。

(10) 紡織工業目 凡絲、蔴、棉毛之紡織，如縲絲、絲織、棉紡、毛織、製蔴

註一 International Labor Office: Systems of Classification of Industries and Occupations, p. 37

等，屬此目。

(11) 服用品目 凡衣服、內衣、鞋、襪、帽等之製造，屬此目。

(12) 皮革品目 凡皮革、皮裘以及各種皮件之製造，如皮箱、皮帶、馬鞍等屬此目。但已列入服用品類之皮件，不在此例。

(13) 飲食品目 凡日常飲食品以及其他飲食品的製造，如糖果、罐頭、煙、酒等，屬此目。

(14) 造紙印刷目 凡造紙、印刷、裝訂、以及照相材料之製造，屬此目。

(15) 飾物儀器目 凡學術用品、樂器、鐘表、金、銀、玉石、飾品，屬此目。

(16) 其他工業目 凡不入上列任何一目者，屬此目。

#### (C) 服務門

(IV) 運輸交通類 凡一切海陸空之運輸交通，如郵電、航業、轉運等屬此類。

#### (V) 商業金融類<sup>註一</sup>

(1) 貨品販賣目 凡一切衣、食、住、用貨品之販賣，屬此目。

(2) 經紀介紹目 凡經紀、捐賣、代售、交易所、薦頭等，屬此目。

(3) 產物貸貨目 凡房屋、地產、以及物品之貸貨，屬此目。

(4) 金融保險目 凡各種金融機關，以及保險事業等，屬此目。

(5) 生活供應目 凡人生日常生活之供應屬此目。

(VI) 公務國防類 凡政務、黨務、以及軍警人員，如海陸空軍、警察、消防、屬此類。

(VII) 自由職業類 凡以一種專門職業或技術為社會服務者，如醫師、律師、工程師等，屬此類。

(VIII) 家庭及個人服務類 凡為家庭或個人服務使用而收受酬報者，屬此類。

## 第二節 職務分類

**職務分類的優點** 工資於業務分類之外，再依職務分類，有三個優點：

註一 童家璽：我國職業分類之商榷 立法院統計月報第一卷第二期

- (1)不但各業工人工資,有了比較,各職工人工資也有比較的可能;
- (2)工人技能之高低,從職業分類中,也可以看出;
- (3)即使對於工業界之情形素不熟悉的人,也可以知道工資等級和各業工廠所做的是一些什麼工作。

**職務分類的原則和方法** 國際勞工局的業務分類,雖已將一個國家所有的企業包括在內,但是對於職務分類,仍未訂定標準,我們的工資調查,祇限於製造工業,屬次級生產門,我們的職務分類,亦即以製造程序為原則。在未將某業的職務從事分類之先,從原料進廠一直等到製成出產品為止,中間所經過的工作過程,一一調查清楚,然後即依各人在這製造的程序中,所做的職務將內容相同性質相近的併合成類。這種分類編定之後,又送到各廠請予指正,再和廠方幾次討論屢經修改之後,方能適用。這種職務分類,和廠方的分部分職法,內容或有不同。有許多職務名異而實質相同的,我們替牠們併合起來。又有許多職務為各部所共有的,但各部可以替換擔任,我們也替牠們併合起來。所以一個職務內,或許包括好幾個職務。如此分類,才不致過分繁雜,讀者當不難得到一個具體的印象;且也不致過分簡略,過簡,則一切職務未必全能一律包括在內了。職務分類,不但對於研究工資問題的人有很大的幫助,即對於勞資糾紛調解工作上,亦不無貢獻,因為從職務分類,可以知道做什麼工作的人,就應當得到多少工資。可是我們所擬的這種職務分類方法,是不是確當的,現在尚無從斷定,將來或者仍有變更,亦未可知。下面便是本市各業的職務分類法:

### 職務分類

#### I. 木材製造目

##### (A) 鋸木業

1. 木工——鋸木
2. 司機——修機、生火、機匠
3. 雜務——司務、小工

#### II. 冶鍊工業目

##### (A) 翻砂業



1. 木模——木匠
2. 翻砂——鑄鐵
3. 爐灶
4. 雜務——小工

### III. 機器及金屬品目

#### (A) 機器業

1. 鉗工——鉗床、錄床、銑床(線床)、磨床
2. 車工——車床
3. 工匠——木模、打鐵、冷作、洋鐵匠(白鐵匠)、鍍鎳
4. 雜務——小工、起重工

### IV. 交通用具目

#### (A) 造船業

1. 木模——鋸木
2. 翻砂
3. 打鐵
4. 打銅
5. 車工——車床
6. 鉗工——鉗床
7. 電燈匠
8. 機務
9. 雜務

### V. 土石製造目

#### (A) 玻璃業

1. 吹磨
2. 圈夾
3. 烘冷

## 4. 雜務

## VI. 化學工業目

## (A) 製皂業

## (a) 製造部

1. 溶油
2. 製皂——配料(司料子缸或石灰缸)、製松香、燒皂、軋皂、裁皂(切皂)
3. 提甘油——司甘油池(油缸)
4. 打印

## (b) 裝璜部

1. 包裝——包皂、貼商標(貼牌子)、打包、裝箱、(釘皂箱)
2. 製盒——做紙盒、糊版子

## (c) 機務部

1. 司機——生火、司引擎
2. 修理——銅匠、泥水匠、木匠
3. 雜務——揩皂、小工

## (B) 火柴業

1. 齊梗——值車(理梗、垃圾)
2. 排板——排後車、軋頭
3. 上油——上落車、拷板、排車、生火(修排車)
4. 上藥——調藥(調白藥、調雜藥、合藥)、反板、排車(排油車、排濕車)
5. 烘頭——看頭子、排車、生火
6. 折板——排車、排燥車、排空車、搖雙頭車、掇盤
7. 裝盒——反盤、掉破盒、掇盒、發盒、收壽
8. 刷燐——調燐、搖燐車、管刷燐、烘房
9. 包封——包紙包、打包、掇盤

## 10. 雜務——棧司、掃地、看廁

## (C) 搪瓷業

## (a) 製坯部

1. 製坯——製碗、爐等坯、白鐵匠
2. 修理——機匠

## (b) 塗瑯部

1. 製粉——配粉、磨粉、燒粉
2. 洗坯——酸洗、修坯
3. 塗瑯——燒爐灶、燒瓷

## (c) 美術部

1. 貼花
2. 堆花
3. 印花——繪板、製板、刷膠、楷粉、印刷
4. 噴描——做字牌、描金

## (d) 包裝部

1. 檢查
2. 包裝
3. 附雜務

## VII. 紡織工業目

## (A) 縲絲業

1. 抄繭——揀繭
2. 縲絲——a. 長車、b. 替車、c. 盆工
3. 扯吐
4. 整絲——搖絲、絞絲、接頭、打包
5. 機務——淘沙、木匠、銅匠、生火、扛煤
6. 雜務——各間司務

## (B) 棉紡業

## (a) 清花部

1. 值鬆花車——和花、折包、相花
2. 值彈車花——清花、嘯花
3. 其他值車——值軋花車、值回絲車、值紗頭車、值皮棍車、值垃圾車

## (b) 梳棉部

1. 抄鋼絲
2. 值鋼絲車
3. 其他——送花、送花衣、送花捲(運花捲、運棉條)、磅花、拖花

## (c) 粗紗部

1. 頭目——女目、宕管、小工頭、童工頭
2. 值棉條車——頭二道值車(望車)
3. 值粗紗車——頭二三道值車、幫車、幫接頭(幫生接頭)、落紗(換紗)、幫落紗
4. 其他——搨紗、收擺筒管、收花

## (d) 細紗部

1. 頭目——工頭、班長、宕管、工目、小工頭、童目
2. 值細紗車——接頭(當車)、幫接頭(接紗頭)、落紗
3. 收擺筒管
4. 養成工——生手
5. 其他——拉紗、搨紗、磅紗、派粗紗、送細紗、倒紗、捲錠盤(捲花衣)、收回花(收花衣)、搖車頭、運管
6. 驗紗——搖格令

## (e) 搖紗部

1. 頭目——女目、宕管
2. 值搖紗車

3. 其他——着水(潤水)、派紗(倒紗)、收筒管、扛紗、磅紗、理筒脚、搖色紗、回紗

## (f) 成包部

1. 秤紗
2. 打包——打綾、打小包、打大包、打草包
3. 其他——搖札線(搖紗線)、繞紗球、商標、包紙包

## (g) 揀花部

1. 揀花——油花、白花
2. 其他——打包(脚花打包)、踏包、縫袋

## (h) 準備部

1. 保全——各部修機、平車、揩車、加油、生綫、牙齒、配件、盤鋼絲、磨鋼絲、磨蓋板、換蓋板、絞錠壳、絞錠子、換毛刷、膠皮帶、漆皮棍
2. 司機——引擎、電匠、生火、扛煤、鑲繩
3. 工匠——機匠、其他工匠(銅匠、車床、鑄床、鉗床、白鐵、白鐵匠、泥水匠、木匠、竹匠)、電桿、做皮棍
4. 雜務——掃地、圾垃車、掃馬路、看水汀、燒水、看電梯、看廁、搜身(抄紗)、雜差、拾花童工

## (C) 絲織業

## (a) 經部

1. 絡絲
2. 拚頭
3. 煮漿——上漿、絡漿
4. 值整經車——揆經
5. 結頭

## (b) 緯部

1. 絡絲

2. 拚頭
  3. 打線——倒綫
  4. 值搖緯車——搖紆
- (c) 織綢部
1. 織工——值車
  2. 生手
- (d) 機務部
1. 司機
  2. 雜務
- (D) 棉織業
- (a) 經緯部
1. 頭目——女目、宕管、童工頭(管筒子)
  2. 值經紗車——值車(牽經紗、整經)
  3. 值筒子車——值車(收、換、做筒子、落紗)、派紗、扛紗
  4. 值紆子車——值車(緯紗車、搖紆、腳車)
  5. 值漿紗車——值車(前後車、漿缸、打漿、浸料、整漿)
  6. 穿棕——分頭、穿扣、穿頭
  7. 其他——扛軸(推軸、上軸頭、扛軸頭、管軸、落盤頭、落軸)、派經、挑紗、倒紗、發紗、磅紗、送緯、派緯、繞紗球
- (b) 織布部
1. 頭目——女目、宕管(幫接頭)、小工頭
  2. 值布車——織工
  3. 其他——量布(碼布)、落布(寫布)、捐布(送布)、噴露(落水)、發紆紗、上軸(架軸、推盤頭)
- (c) 整理保全部(附雜務)
1. 整理——派布、看布(看壞布、修布)、摺布(齊布)、刮布、刮絨(提絨),

秤布、打印(商標)、打包、拷鐵皮

2. 保全——司馬達、修機、修棕扣、修梭子、加油、揩車、平車
3. 雜務——掃地、雜工、看廁、理垃圾、小工等

(E) 針織業

(a) 搖工部

1. 搖紗——落線、繞紗、絡織
2. 搖絲——絡絲、接絲、掉絲

(b) 織工部

1. 值手搖機——織襪、搖羅紋
2. 值電機——套統
3. 縫紉——縫襪頭、繡花
4. 其他——起捲

(c) 整備部

1. 染色——洗襪
2. 整理——看綫、驗襪、抽綫、折綫、修襪、補襪、反襪、套襪、烘襪、壓襪
3. 裝配——配色、配襪、裝璜
4. 司機——馬達、引擎、生火

(F) 漂染業

1. 做絲光——精染、撫紗
2. 染色——染間工人、打樣
3. 撇紗——撇綫、撇光
4. 整理——晾曬、打包

VIII. 皮革品目

(A) 製革業

(a) 製皮部

1. 白皮——削皮、刮肉、退毛

## 2. 染皮

a. 染紅皮——浸皮、鞣皮

b. 染湖綠皮

3. 值車——軋皮、磨皮(磨擦)、壓乾、壓平

4. 其他

## (b) 機務部

1. 司機——司馬達、引擎、生火、機匠

2. 雜務——掙皮、打包、小工

## IX. 飲食品目

## (A) 麵粉業

1. 下麥——喂原料、搗麥

2. 值機——領班、看機器、加油

3. 打包——絞包(絞粉)

5. 堆粉機務——頭目、司馬達、引擎、生火、機匠

6. 修理——木匠、白鐵匠

7. 雜務——修袋、點貨、發貨、老司務、巡查

## (B) 榨油業

1. 榨油——剝花衣、打花、軋花、抄花漿、喂仁、喂子、磨子、磨餅、蒸餅、抄餅、做餅、出餅、車餅、剝餅、接餅、拚餅粉、篩子、開磅、扛花殼、司風箱

2. 清油

3. 機務——生火、修機、加油、機器(小工)、接繩(鑲繩)、修皮帶

4. 修理——木匠、鐵匠、竹匠、泥水匠、鉛匠(白鐵匠)、漆匠

5. 雜務——袋司(修麻袋、修并布、拆并布)、下貨、扛煤、棧司

## (C) 製蛋業

1. 收蛋——頭目、磅蛋、拖蛋、吊車、堆莊



2. 照蛋——頭目、管抬、洗盤、理篩、理蓋
3. 拷蛋——頭目、管抬、拷全蛋、拷分蛋、拷次流青、嗅蛋、倒蛋、洗坯、穀池
4. 灌廳冷氣——頭目、烘廳、挑廳、封口、管亞摩尼亞桶、抄冷度、冷藏
5. 烘蛋白——頭目、烘白、揀選
6. 裝箱——刷字、打箱
7. 工匠雜務——頭目、電匠、銅匠、木匠、泥水匠、白鐵匠、小工、掃地、雜務等

## (D) 煙草業

## (a) 煙葉部

1. 烘葉——蒸葉
2. 拍葉——配葉、揀葉、軋葉頭、軋烟經、上藥水、加香
3. 砌葉——砌葉絲

## (b) 製煙部

1. 捲煙——司機員、司機生
2. 焙煙
3. 揀煙——篩煙灰

## (c) 包裝部

1. 包煙——錫包、大小包
2. 裝罐
3. 裝箱
4. 製盒

## (d) 機務部

1. 司機——馬達、引擎、生火
2. 修理——機匠、加油、木匠(製木箱)、磨刀
3. 雜務——電梯、掃地

## X. 造紙印刷目

## (A) 造紙業

## (a) 原料部

1. 揀布——揀紙
2. 剪彈——打布、值軋蘆車、值切草車、值剪刀車、值灰沙車
3. 蒸煮——調石灰、調燒礆、裝球及出球
4. 打料——燒膠水、調漂粉、調膠水、漂洗、打漿(司漿池)、調漿車

## (b) 造紙部

1. 製紙——管漿筒、管漿盆、銅絲布、絨毯、烘缸、值軋光車、值切紙車
2. 接紙
3. 數選——數紙、選紙、打包

## (c) 機務部

1. 司機——司馬達、引擎、爐子、生火
2. 修理——機匠、鐵工、木工、沙井工
3. 雜務——棧司、看水、扛捧、雜工

## (B) 印刷業

## (a) 鉛印部

1. 鑄字——刻字、做銅模、澆字
2. 排字——校對、來拿機或瑪拿機排字
3. 製板——打紙版、澆鉛版、製電版、鑽版、刨邊、製木底、修版、藏版
4. 印刷——頭二三等手、澆膠棍
5. 裝訂——排書、切書、割線、燙金、裝面、包札、手摺、機摺、機綫、手線、打洞

## (b) 石印部

1. 圖畫——繪圖、繪石、雕刻
2. 製原版——單色、彩色、磨色、磨鉛皮

3. 印刷——石印、鐳版印、膠板印

4. 裝切——切紙、上光、刷膠

(c) 藝術製版部

1. 照相——做版、爛銅鋅版、裝木底、單色銅版、單色鋅版、多色銅鋅版

2. 凹版——刻原版、過鋼版

3. 影寫版——做版

(d) 雜務——修理機器、電燈馬達、木工漆工、運送雜役

## 第五章 工資指數之編製

### 第一節 公式之應用

**各國工資指數所用的公式之歧異** 工資指數之編製，有兩個要點：(1)公式(2)基期。查閱各國工資指數採用的公式，不甚一致<sup>註一</sup>。例如南非合衆國與美國是採用加權算術平均法計算的，德國、澳洲、奧國、加拿大、丹麥、意大利以及英國等是採用簡單算術平均法計算的。簡單算術平均法，計算最易，但所得結果不能十分滿意。加權算術平均法，稍勝一籌。究竟應用什麼公式最爲適宜，則學者的意見，更不甚一致。其中最可注意的，是費暄教授 Prof. Irving Fisher 的理想公式。但是因爲理想公式的計算方法過分繁雜，他又介紹下面的一個公式：

$$\frac{\sum p_1 q_0}{\sum p_0 q_0}$$

在此公式中， $q_0$  爲基期某業或某職某種工人的工人數， $p_0$  爲基期該種工人的平均工資數， $p_1$  爲計算期該種工人的平均工資數。這個公式，不但搜集權數比較理想公式容易，因爲不要逐期變換，並且計算手續，亦較理想公式爲簡便。這在上海特別市工資指數之試編一書內，已有詳細之說明，這裏只能補充解釋幾句。本來工資指數的升降，不僅由工資本身的變動，即人數的變動關係的重要也相等。編製指數，一定要假定一方面不變動，然後他方面的變動，才可尋出個頭緒來。這個公式，是假定基期的人數不變動，所謂權數便是。

**基年問題尙未解決** 我們的工人實際收入統計，本擬以一九二六年爲基年，因爲這一年很適合國際的趨勢和國內經濟的情形。但廠家對於這搜集過去的工資賬簿，覺得麻煩，不願幫忙，有的廠家，因爲更換廠主或保存不得其法，帳簿確已遺失了。因此，又想改用一九三〇年爲基年，以希與第二屆國際勞工統計專家會議將生活費指數採用一九三〇年爲基年的主張相一致。我們的工人實際收入統計，只有一年半的結

註一 International Labor Office: Methods of Statistics of Wages and Hours of Labor, pp. 33-58.

果，我們的工資率統計，只有一年的結果，不論理論上要怎樣選擇基年，而事實上僅有一年多的結果，似尚不可作為基年的材料，因為搜集和編製工作上或猶有未盡善之處。邇來金貴銀賤的問題發生，物價或有相當的變動，但是對於工人生活究竟影響到若何程度，尚難預料。所以一九三〇年能否採用為基期，必待精密的考慮，方可決定。其實指數編製之遲早，並沒有重大的關係，只要材料問題，先有了適當的解決，則指數總可以編製出來的。

## 第二節 幾個附帶問題

關於編製工資指數工作，尚有幾個重要問題<sup>註一</sup>，在這裏要附帶討論一下：

一. 工人技能問題 考工人工資之高低，固然業別、職務別、性別、年齡別都有關係，但是工資的釐訂，當然以技能為最重要。研究工資的人，也希望在技能和工資的關係上得到一個深切的印象。工資指數，即使能夠分開業別、職務別、性別、年齡別編製，究不及分別技能高低而編製的為佳，因為同一性別、同一年齡，同一職務、和同一工作時間的工人，因技能有高低，工資即有大小之別。考各國通行慣例，對於工人技能，大概分做三個等級：(1)有技能(skilled)，(2)半技能(semi-skilled)，(3)與無技能(unskilled)，究竟這種分級，依據何種標準，則無從確定。我們對於這個問題，曾經召集各業工廠代表討論，意見分歧，終無結果。我們只將工人實際收入統計分別男女童三種工人編製。我們的工資率統計，却先依男女童工人分而後依職務分。工人工資之依職務分，雖不及依技能分的好，然從職務分類中，亦可對於技能問題明瞭一些。同一職務的工人工資，雖有高低之分，然就一業中一般情形觀察，則需要技能的職務和不需要技能的職務，不難一望而知。將來即使預備分別技能高低編製指數，這種材料雖不能完全拿來做根據，亦可以作參考之用了。

二. 工作間輟問題 工廠裏面常有做不足一個月的工人，倘使將這種工人一併計入，工人實際收入，必因而扯低，但因為依照廠家習慣，大都做足一月規定日數，才可給獎，

註一 上海特別市社會局：上海特別市工資指數之試編 民國十八年 上海大東書局

所以這種工人的人數不多，還不致發生重大的影響。我們在試辦期內，曾設法將這種工人和他們的工資等，一概剔除。對於一般廠家按月去抄錄這種工人的工作日數、人數和工資等等，還不是不可能，至於規模宏大的廠家，人數在千人以上，要把這種工人，一一提出，事實上很感到困難，並且我們所編的統計，是工人實際收入，倘使把這種工人一概剔除，反有提高平均數偏誤性的可能。所以本局對於這種工人在可能範圍以內，仍是按月調查，以便在分析研究的時候，作為一種參考。

三. 膳宿問題 由廠供給膳宿的工人工資，必較由工人自備的低，如果於調查工資時，不把膳宿問題查清，則統計結果，不是失之過高，即失之過低。對於這個問題，我們把那些由廠供膳的工人每人每月酌加六元，供宿的酌加兩元。但是廠方如果註明膳宿費數目，則照原數增加。工人實際收入統計，就是這樣辦的。

## 第六章 工作時間統計類別及編製法

### 第一節 工作時間統計類別

**工作時間統計和工資統計之關係** 工作時間統計和工資統計的關係，本極密切。勞工之出賣勞力和僱主之購買勞力，不僅以工資為先決條件，同時對於工作時間，也須議定。勞工希望一日的工作時間短，工資多，僱主希望工作時間長，工資少。雙方因觀察點之不同，而對於工作時間問題的態度和應付的手段，亦即各異。於是工作時間統計也就覺得重要了。

**日常工作時間和實際工作時間統計** 工作時間統計，也可以分做兩種<sup>註一</sup>：一種是與生產有關的工作時間統計，一種是與工作狀況有關的工作時間統計。前者係指日常工作時間而言。所謂「日常工作時間」(full-time hours)，是經過勞資雙方協議的手續而訂定的，或者是由國家司法或行政機關的法令制定的。這正和工資率的性質一樣，工人在未入工廠之先即可以預知的。後者係指實際工作時間而言。所謂「實際工作時間」(actual hours)，其內容不僅是要把延長的工作時間加入日常工作時間計算，即縮短的工作時間也要除清。這和工人實際收入的性質一樣，必待工人入廠工作以後方可知道。中國工廠工人的工作時間，有的曾經過勞資雙方協議的手續訂定的，但恐怕是極少數。就普通一般情形說，大概是由廠方預先訂定的。平時延長工作時間或縮短工作時間，也大都出自廠方主動。目前中國勞工，對於工作時間問題之爭執，尚不嚴重<sup>註二</sup>，因為他們的興趣，似乎集中在工資問題上。

**其他名詞** 這種由廠方預先訂定的工作時間，另外有一個名詞，叫做「廠定的工作時間」(prevailing hours)，和日常的工作時間的性質略有不同。尚有所謂「協定的工作時間」(union hours)，是勞方團體和資方團體協議之後訂定的，這和日常工作時間訂定的手續相同，但祇是一種協定的標準的工作時間，而日常的工作時間，

註一 International Labor Office: Methods of Statistics of Wages and Hours of Labor, pp. 28-30.

註二 上海特別市政府社會局: 上海特別市罷工停業統計 民國十八年 上海商務印書館

是實際已做的工作時間。這是個很顯著的分別<sup>註一</sup>。

**每小時平均工資率合成每日平均工資率之理由** 日常工作時間統計，最好能代表一個星期的情形；但查中國工廠慣例，除計件工人工資係按件給值外，計時工人工資，或按日計算，或論月計算，而沒有按週計算的。我們調查得來的工資率材料，化成每小時的工資率之後，又合成一日的工資率。這個辦法，有兩個目的：第一，可以適合本國情形；第二，可以使得讀者對於各業工作時間情形得到比較具體的印象，因為本國工廠工人的工資實在很低，每一小時，最多的不能超過一角五分，最少尚有一二分的，化成每日平均工資率之後，當然容易瞭解了。

**我們所調查的工作時數實際即是廠定的工作時間但偶有例外** 但是我們的每日平均工作時數，實在和國外所謂日常工作時間的性質和內容尚不相同，我們所調查的實際工作時數，却與國外所謂廠定的工作時間的意義相近。只有某種計件工人的工作時數調查，則不能完全依據廠定的工作時間，而不得有個別的工作時間的調查，因為即使廠內的工作依照規定的工作時間進行，而此種工人或許尚有不能一致的。所以計時工人的工作時間調查，比較計件工人既容易且又可靠。

實際工作時間統計，和工人實際收入統計的關係很切。可惜我們的工人實際收入統計，係按月編製的。統計的結果，祇代表一個月的情形，而未能按週或按日或按時編製，以代表一週一日或一小時的情形。假使我們要編製每小時的工人實際收入數，則實際工作時間統計，斷不可缺少。實際工作時間統計，既然要除去縮短的工作時間，又要加入延長的工作時間，則短工問題，非常重要。我們所編的工人實際收入統計，對於這個問題的解決辦法，在前一章內已有說明，茲不贅述。

## 第二節 工作時間統計編製法

**工作時間調查也以九月二十五日為標準日期** 現在把我們搜集工作時間統計的材料方法及編製方法略說一說。我們的工人實際收入統計，在最初舉辦的時候，因為事實上的困難，不能同時舉辦工作時間統計。在上海特別市工資指數之試編一書中

註一 International Labor Office: Hours of Labor in United States, p. 3.



之各業工廠工人工資表內，也曾附帶調查工作時間，但並不是準確的統計。我們在調查工資率的時候，即調查工作時間。這和工資率調查一樣，也取十八年九月二十五日為標準調查時期。計時工人的工作時間，各部各職差不多無甚參差，調查尚易。計件工人的工作時間，或因人而殊。技能之高低，工作之勤惰，體力之強弱，和生產用具之優劣，對於工作時間之長短直接間接都有關係。我們不得不商請廠家將九月二十五日的各部各職各種工人的工作時間詳細查明，如果九月二十五日不及準備，可通融兩三日。同時工帳亦改用同一日期。

**工作時間的計算方法和工資一樣但手續則較簡** 工作時間的計算方法，和工資的計算方法，是一致的。先將各種職務各種工人的工作時數彙集後，用加權算術平均法計算一職的平均工作時數，然後又彙合各職的平均數用加權算術平均法而得一業的平均工作時數。又因計時和計件工人的工作時間差異很大，所以也和工資率的辦法一樣分開編製。我們所調查的工作時間，既然是一種廠定的工作時間，所以平均每日工作時數，雖是分組計算，但工作時數的組數無多，故實際計算工作，比較工資率為簡便。因此，工作時間統計，在全書內所占篇幅很少，而又附在工資率統計之內發表；然在各種勞工統計之中，工作時間統計和工資統計之重要程度，似乎不相上下，我們不能因為計算手續簡便和發表形式簡單，就忘記了牠的重要性。這點要請讀者注意。

## 第二編

### 十八年之工資率與工作時間統計<sup>註一</sup>

關於編製工資率，工人實際收入和工作時間統計的理論上和實際上的種種問題，在第一編各章內已有詳細的討論和說明，此後不再贅述。不過這裏有一點要聲明的，就是第二編第一章所載的工廠及工人數之分析，似應併在第一編第四章內研究，但第一編第四章所載的係關於業務和職務的分類方法，本編第一章所載的，完全是調查的結果和分析，兩者如果併入一章，反覺眉目不清，所以分開說明。

#### 第一章 工廠及工人數之分析

工廠及工人總數是合實得和估計兩種數字而成 在全市工人概況調查的計劃未能實現之前，要明瞭各業各種工人數的分配情形，惟有從估計方法入手。雖名估計，我們大部分的工作，仍舊從調查方面進行，到了必不得已的時候，才不得不以估計方法補救。因此下面的各業廠數和工人數，係合實得和估計兩種數字而成。每表之後把材料來源，實得廠數，實得工人數、估計廠數人數和估計方法分別加以說明，並且又把各業的廠名依照工人數的多寡次序排列下去。讀者不但可以知道各業工廠男工女工及童工的分配情形，並且可以知道各業各廠依照人數多寡次序而排列的情形。在各業中廠數最多者，首推機器業，計 518 廠，其次為印刷業，計 419 廠，又次為棉織業，計 405 廠，又次為針織業，計 177 廠，又次為製革業，計 150 廠，又次為翻砂業，計 120 廠，又次為繅絲業，計 107 廠，而廠數自五十家至九十九家者，有棉紡、絲織、烟草等業，自十家至四十九家者，有鋸木、造船、玻璃、製皂、搪瓷、漂染、麵粉、榨油等業，在十家以下者，有火柴、製蛋、造紙等業。然因工廠模規和工作性質的不同，所以一業廠額雖多，而人數未必即多。各業工人數最多者，首推棉紡業，計 110,882 人，其次為繅絲

註一 本年工資和工作時間統計各項數字，均以本編為準。

業，計 51,376 人，又次爲棉織業，計 29,244 人，又次爲烟草業，計 24,297 人，又次爲印刷業，計 13,337 人，又次爲針織業，計 10,125 人，而人數自五千至九千九百九十九者，有機器、造船兩業，自三千至四千九百九十九者，有玻璃、絲織、製蛋等業，自一千至二千九百九十九者，有鋸木、翻砂、製皂、火柴、搪瓷、漂染、製革、麵粉、榨油、造紙等業。二十一業總計廠數凡 2,326 家，工人凡 285,700 人，內男工 84,786 人，佔總數百分之 29.7，女工 173,432 人，佔總數百分之 60.7，童工<sup>註一</sup> 27,482 人，佔總數百分之 9.6。茲將各業廠數工人數表依次列後：

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註一 篇中童工，依照慣例，是指十六歲以下的工人。可是在調查的時候，勢不能詳考各個工人的確實年齡。所以童工與成年工人的分別，尙不能必其精確無訛。

第一表 I. 木材製造目：鋸木業

| 廠名     | 工人數 |   |   |     | 廠名      | 工人數   |   |   |       |
|--------|-----|---|---|-----|---------|-------|---|---|-------|
|        | 男   | 女 | 童 | 總   |         | 男     | 女 | 童 | 總     |
| 1. 遠東  | 381 |   |   | 381 | 13. 長豐  | 20    |   |   | 20    |
| 2. 祥泰  | 356 |   |   | 356 | 14. 森泰  | 20    |   |   | 20    |
| 3. 匯芳  | 350 |   |   | 350 | 15. 盛記  | 18    |   |   | 18    |
| 4. 榕茂  | 230 |   |   | 230 | 16. 益豐  | 16    |   |   | 16    |
| 5. 野村  | 193 |   |   | 193 | 17. 永大  | 7     |   |   | 7     |
| 6. 蘭格  | 82  |   |   | 82  | 18. 源順  | 6     |   |   | 6     |
| 7. 久記  | 44  |   |   | 44  | 19. 瑞昌  | 6     |   |   | 6     |
| 8. 德成厚 | 35  |   |   | 35  | 20. 源茂盛 | 6     |   |   | 6     |
| 9. 黃茂記 | 35  |   |   | 35  | 21. 陳順記 | 6     |   |   | 6     |
| 10. 震升 | 24  |   |   | 24  | 22. 彙泰  | 4     |   |   | 4     |
| 11. 巽大 | 23  |   |   | 23  | 23. 泰茂  | 4     |   |   | 4     |
| 12. 順泰 | 20  |   |   | 20  | 總計      | 1,886 |   |   | 1,886 |

## 說明

本市鋸木工場，大都應用人力，完全運用機器的，却不甚多，凡運用機器的工場，大都稱「廠」，但亦有稱「行」的。

上列材料，本局於十八年八月派員按廠調查，實得廠數計 23 廠，實得工人數計 1,886 人。

本市所有運用機器的木行，均在其內。木行內的工作，以工人為主，機器為副，本局祇將機器鋸木的工人人數列入，而不用機器的工人人數則剔去，所以事實上各該木行工人數，要比本表所載人數為多。

第二表 II. 冶鍊工業目：翻砂業

| 廠名      | 工人數 |   |    |     | 廠名      | 工人數 |   |    |    |
|---------|-----|---|----|-----|---------|-----|---|----|----|
|         | 男   | 女 | 童  | 總   |         | 男   | 女 | 童  | 總  |
| 1. 兵工廠  | 131 |   | —  | 131 | 40. 盈豐  | 9   |   | 5  | 14 |
| 2. 亞東   | 46  |   | —  | 46  | 41. 王雲記 | 10  |   | 4  | 14 |
| 3. 葵泰   | 32  |   | 8  | 40  | 42. 復新  | 12  |   | 2  | 14 |
| 4. 利泰   | 30  |   | 10 | 40  | 43. 曹元記 | 9   |   | 5  | 14 |
| 5. 祥豐   | 24  |   | 12 | 36  | 44. 順泰  | 8   |   | 5  | 13 |
| 6. 公昌   | 23  |   | 10 | 33  | 45. 天運  | 4   |   | 9  | 13 |
| 7. 鑄昌   | 17  |   | 15 | 32  | 46. 萬昌  | 13  |   | —  | 13 |
| 8. 萬興   | 16  |   | 15 | 31  | 47. 同興  | 12  |   | —  | 12 |
| 9. 永泰   | 12  |   | 18 | 30  | 48. 信記  | 2   |   | 10 | 12 |
| 10. 崇慎新 | 20  |   | 8  | 28  | 49. 合興  | 7   |   | 5  | 12 |
| 11. 瑞昌祥 | 21  |   | 6  | 27  | 50. 福興  | 8   |   | 3  | 11 |
| 12. 協興  | 27  |   | —  | 27  | 51. 興昌祥 | 6   |   | 5  | 11 |
| 13. 義興盛 | 26  |   | —  | 26  | 52. 遠生興 | 6   |   | 5  | 11 |
| 14. 葉興昌 | 20  |   | 5  | 25  | 53. 協成  | 11  |   | —  | 11 |
| 15. 順興  | 11  |   | 14 | 25  | 54. 永大  | 9   |   | 2  | 11 |
| 16. 公順興 | 18  |   | 7  | 23  | 55. 陸雲記 | 8   |   | 2  | 10 |
| 17. 慎和  | 18  |   | 6  | 24  | 56. 協順  | 10  |   | —  | 10 |
| 18. 振泰  | 15  |   | 8  | 23  | 57. 泰昌  | 10  |   | —  | 10 |
| 19. 祥泰  | 13  |   | 9  | 22  | 58. 奚順昌 | 1   |   | 9  | 10 |
| 20. 洪大  | 22  |   | —  | 22  | 59. 曹全昌 | 2   |   | 8  | 10 |
| 21. 永泰  | 13  |   | 8  | 21  | 60. 勤昌  | 4   |   | 5  | 9  |
| 22. 葵昌  | 20  |   | —  | 20  | 61. 曹松順 | 4   |   | 5  | 9  |
| 23. 公順昌 | 15  |   | 5  | 20  | 62. 石振興 | 6   |   | 2  | 8  |
| 24. 應永順 | 12  |   | 8  | 20  | 63. 祥葵  | 3   |   | 4  | 7  |
| 25. 源泰興 | 19  |   | —  | 19  | 64. 曹興昌 | 4   |   | 3  | 7  |
| 26. 協鎔  | 10  |   | 8  | 18  | 65. 沈福昌 | 4   |   | 3  | 7  |
| 27. 盈泰  | 13  |   | 5  | 18  | 66. 周興裕 | 4   |   | 3  | 7  |
| 28. 錫鋁  | 10  |   | 7  | 17  | 67. 周維和 | 3   |   | 4  | 7  |
| 29. 福昌  | 6   |   | 11 | 17  | 68. 義源昌 | 2   |   | 4  | 6  |
| 30. 民泰  | 5   |   | 12 | 17  | 69. 同興  | 2   |   | 4  | 6  |
| 31. 鑠昌  | 10  |   | 7  | 17  | 70. 隆昌  | 3   |   | 3  | 6  |
| 32. 東華  | 5   |   | 11 | 16  | 71. 曹盛泰 | 4   |   | 2  | 6  |
| 33. 義順興 | 4   |   | 12 | 16  | 72. 興昌  | 2   |   | 4  | 6  |
| 34. 同興祥 | 10  |   | 5  | 15  | 73. 永泰  | 2   |   | 3  | 5  |
| 35. 五昌  | 12  |   | 3  | 15  | 74. 裕隆  | 3   |   | 2  | 5  |
| 36. 鴻泰  | 11  |   | 4  | 15  | 75. 義昌  | 1   |   | 4  | 5  |
| 37. 陳信記 | 9   |   | 6  | 15  | 76. 李德昌 | 3   |   | 2  | 5  |
| 38. 永興祥 | 15  |   | —  | 15  | 77. 曹龍昌 | 3   |   | 2  | 5  |
| 39. 項興昌 | 14  |   | —  | 14  | 78. 仁泰  | 3   |   | 2  | 5  |

|         |   |  |   |   |          |     |  |     |       |
|---------|---|--|---|---|----------|-----|--|-----|-------|
| 79. 公義昌 | 3 |  | 2 | 5 | 91. 振興   | —   |  | 3   | 3     |
| 80. 陸順興 | — |  | 5 | 5 | 92. 黃昌記  | 1   |  | 2   | 3     |
| 81. 陳福昌 | 1 |  | 4 | 5 | 93. 樂昇昌  | 1   |  | 2   | 3     |
| 82. 餘豐  | 1 |  | 3 | 4 | 94. 陳福昌  | 1   |  | 2   | 3     |
| 83. 祥泰  | — |  | 4 | 4 | 95. 鴻興   | 1   |  | 2   | 3     |
| 84. 王生記 | 1 |  | 3 | 4 | 96. 鄒茂盛  | 1   |  | 2   | 3     |
| 85. 松蔭  | 1 |  | 3 | 4 | 97. 裴全昌  | 2   |  | —   | 2     |
| 86. 汪新泰 | 1 |  | 3 | 4 | 98. 蔡餘泰  | —   |  | 2   | 2     |
| 87. 黃聚興 | 4 |  | — | 4 | 99. 吳順興  | 1   |  | 1   | 2     |
| 88. 曹林昌 | 2 |  | 1 | 3 | 100. 黃順興 | 1   |  | 1   | 2     |
| 89. 永昌  | 1 |  | 2 | 3 |          |     |  |     |       |
| 90. 戴順昌 | 1 |  | 2 | 3 | 總計       | 997 |  | 452 | 1,449 |

說明

材料來源：

根據上海華德路銅鐵業同業公會報告，按照廠址調查。

實得廠數：

100 家

實得工人數：

1,449 人

估計廠數：

20 家

估計工人數：

200 人

估計方法：

銅鐵業同業公會所有翻砂廠家，僅 30 家，且無人數。本局十八年八月派員分區調查，實得廠數凡 100 家，實得工人數凡 1,449 人。查翻砂廠家規模極小者頗多，廠址不易尋覓，甚至有極偏僻地方僅搭一鉛皮棚懸一極小招牌者。此種廠家遺漏在所難免，估計約有 20 家，每家作十人計算，共計 200 人，內男工占有百分之六十八，童工占百分之三十二，計得男工 136 人，童工 64 人，連同實得數計算，廠數凡 120 家，男工凡 1,133 人，童工凡 516 人，總計 1,649 人。

第三表 III. 機器及金屬製品目：機器業

| 廠名      | 工人數   |   |     |       | 廠名      | 工人數 |   |    |    |
|---------|-------|---|-----|-------|---------|-----|---|----|----|
|         | 男     | 女 | 童   | 總     |         | 男   | 女 | 童  | 總  |
| 1. 兵工廠  | 1,452 |   | —   | 1,452 | 40. 子義昌 | 24  |   | 8  | 32 |
| 2. 大隆   | 196   |   | 100 | 295   | 41. 周新道 | 18  |   | 13 | 31 |
| 3. 中國   | 279   |   | —   | 279   | 42. 同興祥 | 16  |   | 13 | 29 |
| 4. 華東   | 275   |   | —   | 275   | 43. 合昌  | 13  |   | 16 | 29 |
| 5. 孫其美  | 180   |   | —   | 180   | 44. 勤昌  | 21  |   | 8  | 29 |
| 6. 美生   | 169   |   | —   | 169   | 45. 義昌  | 16  |   | 12 | 28 |
| 7. 遠昌   | 88    |   | 92  | 120   | 46. 一新  | 28  |   | —  | 28 |
| 8. 寰球   | 80    |   | 92  | 112   | 47. 中華  | 28  |   | —  | 28 |
| 9. 協成   | 64    |   | 42  | 106   | 48. 發動  | 8   |   | 19 | 27 |
| 10. 明鋸  | 76    |   | 26  | 102   | 49. 慎孚  | 18  |   | 9  | 27 |
| 11. 達利  | 65    |   | 30  | 95    | 50. 永大  | 15  |   | 11 | 26 |
| 12. 新中華 | 58    |   | 30  | 88    | 51. 祥泰  | 23  |   | 3  | 26 |
| 13. 大華  | 56    |   | 26  | 82    | 52. 萬順  | 8   |   | 18 | 26 |
| 14. 匯昌  | 47    |   | 25  | 72    | 53. 合眾  | 26  |   | —  | 26 |
| 15. 遠大  | 46    |   | 25  | 71    | 54. 滙大  | 11  |   | 14 | 25 |
| 16. 萬昌  | 30    |   | 28  | 58    | 55. 精華  | 10  |   | 15 | 25 |
| 17. 新祥  | 40    |   | 15  | 55    | 56. 振興  | 15  |   | 10 | 25 |
| 18. 趙全記 | 40    |   | 13  | 53    | 57. 協盛  | 7   |   | 17 | 24 |
| 19. 范福仁 | 24    |   | 28  | 52    | 58. 中華  | 11  |   | 13 | 24 |
| 20. 馬源順 | 33    |   | 16  | 49    | 59. 卓羣  | 24  |   | —  | 24 |
| 21. 利泰  | 30    |   | 18  | 48    | 60. 姚興記 | 4   |   | 20 | 24 |
| 22. 源興昌 | 20    |   | 26  | 46    | 61. 李明記 | 16  |   | 8  | 24 |
| 23. 公平  | 23    |   | 19  | 42    | 62. 榮昌泰 | 11  |   | 12 | 23 |
| 24. 精明  | 42    |   | —   | 42    | 63. 福慶  | 10  |   | 13 | 23 |
| 25. 巧新  | 17    |   | 25  | 42    | 64. 三星  | 23  |   | —  | 23 |
| 26. 隆昌  | 22    |   | 19  | 41    | 65. 夫利成 | 5   |   | 18 | 23 |
| 27. 達昌  | 16    |   | 25  | 41    | 66. 林記  | 14  |   | 9  | 23 |
| 28. 錦昌  | 25    |   | 16  | 41    | 67. 王永昌 | 5   |   | 17 | 22 |
| 29. 振華  | 30    |   | 10  | 40    | 68. 錦華  | 11  |   | 11 | 22 |
| 30. 振隆  | 16    |   | 24  | 40    | 69. 順和  | 13  |   | 9  | 22 |
| 31. 合興  | 15    |   | 24  | 39    | 70. 恆興  | 8   |   | 14 | 22 |
| 32. 養氣  | 38    |   | —   | 38    | 71. 益泰  | 10  |   | 11 | 21 |
| 33. 公勤  | 38    |   | —   | 38    | 72. 鈞昌  | 21  |   | —  | 21 |
| 34. 吳長泰 | 11    |   | 27  | 38    | 73. 陳順興 | 8   |   | 13 | 21 |
| 35. 恆昌祥 | 37    |   | —   | 37    | 74. 精工  | 7   |   | 14 | 21 |
| 36. 鑄亞  | 37    |   | —   | 37    | 75. 黃德泰 | 6   |   | 15 | 21 |
| 37. 新民  | 36    |   | —   | 36    | 76. 申昌  | 7   |   | 14 | 21 |
| 38. 新康  | 20    |   | 15  | 35    | 77. 姚公記 | 20  |   | —  | 20 |
| 39. 公利  | 17    |   | 16  | 33    | 78. 東興  | 8   |   | 12 | 20 |

|          |    |    |    |          |    |    |    |
|----------|----|----|----|----------|----|----|----|
| 79. 華昌   | 8  | 12 | 20 | 123. 袁順興 | 4  | 12 | 16 |
| 80. 粹豐   | 15 | 5  | 20 | 124. 新恆泰 | 8  | 8  | 16 |
| 81. 林培記  | 6  | 14 | 20 | 125. 大生  | 8  | 8  | 16 |
| 82. 恆大鋸  | 13 | 7  | 20 | 126. 中興  | 12 | 4  | 16 |
| 83. 東昇   | 4  | 16 | 20 | 127. 泉興昌 | 2  | 14 | 16 |
| 84. 鄒文興  | 10 | 10 | 20 | 128. 洽順昌 | 2  | 14 | 16 |
| 85. 華祥   | 8  | 12 | 20 | 129. 元發  | 7  | 9  | 16 |
| 86. 自強   | 20 | —  | 20 | 130. 巴利  | 6  | 10 | 16 |
| 87. 蔣長興  | 6  | 14 | 20 | 131. 天益  | 8  | 8  | 16 |
| 88. 明鋸   | 5  | 15 | 20 | 132. 人和  | 8  | 8  | 16 |
| 89. 大源   | 7  | 13 | 20 | 133. 公益  | 9  | 7  | 16 |
| 90. 達興   | 11 | 8  | 19 | 134. 順華  | 13 | 3  | 16 |
| 91. 李義昌  | 12 | 7  | 19 | 135. 王福記 | 4  | 11 | 15 |
| 92. 建昌   | 19 | —  | 19 | 136. 晉昌祥 | 15 | —  | 15 |
| 93. 森記   | 19 | —  | 19 | 137. 裕和生 | 5  | 10 | 15 |
| 94. 憶昌   | 3  | 16 | 19 | 138. 隆大  | 5  | 10 | 15 |
| 95. 老家興  | 11 | 8  | 19 | 139. 鴻興  | 6  | 9  | 15 |
| 96. 明泰   | 9  | 10 | 19 | 140. 有利  | 6  | 9  | 15 |
| 97. 陳斌記  | 6  | 13 | 19 | 141. 鼎泰仁 | 7  | 8  | 15 |
| 98. 振興   | 7  | 12 | 19 | 142. 周義興 | 3  | 12 | 15 |
| 99. 復興   | 9  | 9  | 18 | 143. 瑞昌  | 6  | 9  | 15 |
| 100. 合昌  | 6  | 12 | 18 | 144. 新昌  | 3  | 12 | 15 |
| 101. 義豐  | 8  | 10 | 18 | 145. 雲昌  | 3  | 11 | 14 |
| 102. 天益  | 7  | 11 | 18 | 146. 和昌  | 4  | 10 | 14 |
| 103. 高聲  | 15 | 3  | 18 | 147. 華明  | 10 | 4  | 14 |
| 104. 協昌  | 9  | 9  | 18 | 148. 瑞昌順 | 8  | 6  | 14 |
| 105. 錦昌  | 13 | 5  | 18 | 149. 協昌  | 6  | 8  | 14 |
| 106. 馬順興 | 3  | 15 | 18 | 150. 馮瑞泰 | 6  | 8  | 14 |
| 107. 鴻泰  | 4  | 14 | 18 | 151. 志興  | 3  | 11 | 14 |
| 108. 華豐  | 6  | 12 | 18 | 152. 徐協記 | 11 | 3  | 14 |
| 109. 錦餘  | 8  | 9  | 17 | 153. 瑞泰  | 6  | 8  | 14 |
| 110. 求興  | 8  | 9  | 17 | 154. 紀昌  | 9  | 5  | 14 |
| 111. 東華  | 9  | 8  | 17 | 155. 南方  | 4  | 10 | 14 |
| 112. 南洋  | 7  | 10 | 17 | 156. 華成  | 3  | 11 | 14 |
| 113. 協泰  | 7  | 10 | 17 | 157. 瑞昌興 | 8  | 6  | 14 |
| 114. 舒榮昌 | 11 | 6  | 17 | 158. 利興  | 5  | 9  | 14 |
| 115. 德昌  | 9  | 8  | 17 | 159. 民新  | 4  | 10 | 14 |
| 116. 王英昌 | 5  | 12 | 17 | 160. 天盛  | 8  | 6  | 14 |
| 117. 榮昌發 | 9  | 8  | 17 | 161. 協興祥 | 8  | 5  | 13 |
| 118. 朱錦記 | 9  | 8  | 17 | 162. 忠興  | 6  | 7  | 13 |
| 119. 義泰  | 7  | 10 | 17 | 163. 吳長泰 | 4  | 9  | 13 |
| 120. 裕森  | 5  | 12 | 17 | 164. 順昌  | 6  | 7  | 13 |
| 121. 興利  | 9  | 8  | 17 | 165. 陸順興 | 3  | 10 | 13 |
| 122. 信昌  | 6  | 10 | 16 | 166. 恆茂  | 3  | 10 | 13 |



|          |    |    |    |          |    |   |    |
|----------|----|----|----|----------|----|---|----|
| 167. 瑞泰  | 5  | 8  | 13 | 211. 華興  | 6  | 5 | 11 |
| 168. 陳志興 | 6  | 7  | 13 | 212. 新泰  | 5  | 6 | 11 |
| 169. 錦昌  | 10 | 8  | 13 | 213. 順昌  | 10 | — | 10 |
| 170. 張利記 | 6  | 7  | 13 | 214. 培生  | 10 | — | 10 |
| 171. 張貴廷 | 5  | 8  | 13 | 215. 福慶  | 10 | — | 10 |
| 172. 全昌  | 8  | 5  | 13 | 216. 榮昌  | 4  | 6 | 10 |
| 173. 信昌  | 8  | 5  | 13 | 217. 震源  | 3  | 7 | 10 |
| 174. 義昌  | 2  | 11 | 13 | 218. 大源昌 | 3  | 7 | 10 |
| 175. 昌泰  | 5  | 7  | 12 | 219. 培源  | 3  | 7 | 10 |
| 176. 仁記  | 3  | 9  | 12 | 220. 競新  | 2  | 8 | 10 |
| 177. 和泰  | 7  | 5  | 12 | 221. 廣興  | 2  | 8 | 10 |
| 178. 協順  | 4  | 8  | 12 | 222. 源盛  | 5  | 5 | 10 |
| 179. 恆益  | 7  | 5  | 12 | 223. 大昌  | 6  | 4 | 10 |
| 180. 源興  | 2  | 10 | 12 | 224. 裕順  | 4  | 6 | 10 |
| 181. 同益  | 5  | 7  | 12 | 225. 協成  | 6  | 4 | 10 |
| 182. 聚興昌 | 2  | 10 | 12 | 226. 慎發  | 4  | 6 | 10 |
| 183. 源昌  | 8  | 4  | 12 | 227. 源昌  | 6  | 4 | 10 |
| 184. 福昌祥 | 4  | 8  | 12 | 228. 鴻興  | 6  | 4 | 10 |
| 185. 一大  | 7  | 5  | 12 | 229. 永泰  | 1  | 9 | 10 |
| 186. 恆昌  | 2  | 10 | 12 | 230. 季順昌 | 3  | 7 | 10 |
| 187. 義順昌 | 5  | 7  | 12 | 231. 大明  | 6  | 4 | 10 |
| 188. 義昌  | 2  | 10 | 12 | 232. 孫聚興 | 3  | 7 | 10 |
| 189. 德泰  | 12 | —  | 12 | 233. 洽順  | 3  | 7 | 10 |
| 190. 華興  | 2  | 10 | 12 | 234. 張元祥 | 5  | 5 | 10 |
| 191. 廣泰  | 6  | 6  | 12 | 235. 劉順興 | 1  | 9 | 10 |
| 192. 福昌  | 2  | 10 | 12 | 236. 德新  | 9  | — | 9  |
| 193. 鑫昌  | 1  | 11 | 12 | 237. 湧興  | 9  | — | 9  |
| 194. 三友  | 5  | 7  | 12 | 238. 史鶴記 | 9  | — | 9  |
| 195. 宏昌  | 5  | 7  | 12 | 239. 大昌  | 9  | — | 9  |
| 196. 正大  | 4  | 7  | 11 | 240. 德昌  | 5  | 4 | 9  |
| 197. 正興  | 5  | 6  | 11 | 241. 合利  | 6  | 3 | 9  |
| 198. 順記  | 5  | 6  | 11 | 242. 永興  | 4  | 5 | 9  |
| 199. 華豐泰 | 4  | 7  | 11 | 243. 益民  | 4  | 5 | 9  |
| 200. 維錯  | 4  | 7  | 11 | 244. 承泰  | 5  | 4 | 9  |
| 201. 東興昌 | 4  | 7  | 11 | 245. 協泰  | 6  | 3 | 9  |
| 202. 周裕昌 | 5  | 6  | 11 | 246. 李槐記 | 5  | 4 | 9  |
| 203. 高永興 | 5  | 6  | 11 | 247. 志泰  | 3  | 6 | 9  |
| 204. 周生記 | 3  | 8  | 11 | 248. 裕錫祥 | 4  | 5 | 9  |
| 205. 德泰  | 5  | 6  | 11 | 249. 馬永興 | 5  | 4 | 9  |
| 206. 銘鏡  | 6  | 5  | 11 | 250. 蔭華  | 3  | 6 | 9  |
| 207. 恆升  | 3  | 8  | 11 | 251. 和興  | 4  | 5 | 9  |
| 208. 華通  | 7  | 4  | 11 | 252. 志斌  | 6  | 3 | 9  |
| 209. 福泰祥 | 3  | 8  | 11 | 253. 復興昌 | 2  | 7 | 9  |
| 210. 震華  | 2  | 9  | 11 | 254. 益泰  | 9  | — | 9  |

|          |   |   |   |          |   |   |   |
|----------|---|---|---|----------|---|---|---|
| 255. 振新  | 4 | 4 | 8 | 299. 寶新  | 3 | 4 | 7 |
| 256. 王榮興 | 4 | 4 | 8 | 300. 森昌  | 3 | 4 | 7 |
| 257. 聯安  | 4 | 4 | 8 | 301. 同興昌 | 4 | 3 | 7 |
| 258. 瑞豐  | 1 | 7 | 8 | 302. 崇昌  | 6 | 1 | 7 |
| 259. 王慶記 | 3 | 5 | 8 | 203. 振昌  | 4 | 3 | 7 |
| 260. 申大  | 2 | 6 | 8 | 304. 福順昌 | 4 | 3 | 7 |
| 261. 昇大  | 4 | 4 | 8 | 305. 德泰  | 3 | 4 | 7 |
| 262. 慶豐  | 3 | 5 | 8 | 306. 裕記  | 5 | 2 | 7 |
| 263. 長興  | 3 | 5 | 8 | 307. 榮昌  | 4 | 3 | 7 |
| 264. 鴻泰  | 4 | 4 | 8 | 308. 德康  | 3 | 4 | 7 |
| 265. 開泰  | 5 | 3 | 8 | 309. 裕成  | 3 | 4 | 7 |
| 266. 謙信  | 4 | 4 | 8 | 310. 明昌  | 5 | 2 | 7 |
| 267. 戴聚源 | 4 | 4 | 8 | 311. 王餘記 | 2 | 5 | 7 |
| 268. 新中興 | 3 | 5 | 8 | 312. 益昌  | 3 | 4 | 7 |
| 269. 萬興  | 4 | 4 | 8 | 313. 興大  | 2 | 5 | 7 |
| 290. 源義  | 4 | 4 | 8 | 314. 曹慶昌 | 3 | 4 | 7 |
| 271. 長昌  | 1 | 7 | 8 | 315. 楊生記 | 4 | 3 | 7 |
| 272. 錦章  | 3 | 5 | 8 | 316. 東興記 | 3 | 4 | 7 |
| 273. 費永記 | 5 | 3 | 8 | 317. 興記  | 5 | 2 | 7 |
| 274. 新興  | 4 | 4 | 8 | 318. 隆昌  | 1 | 6 | 7 |
| 275. 惠昌祥 | 2 | 6 | 8 | 319. 協昌  | 4 | 3 | 7 |
| 276. 慎昌  | 4 | 4 | 8 | 320. 鑫成  | 3 | 4 | 7 |
| 277. 瑞昌  | 2 | 6 | 8 | 321. 立興昌 | 4 | 3 | 7 |
| 278. 大華  | 4 | 4 | 8 | 322. 瑞興昌 | 2 | 4 | 6 |
| 279. 慎昌  | 2 | 6 | 8 | 323. 明鑫  | 2 | 4 | 6 |
| 280. 榮昌  | 3 | 5 | 8 | 324. 義成  | 3 | 3 | 6 |
| 281. 鑫昌  | 4 | 4 | 8 | 325. 沈恆昌 | 2 | 4 | 6 |
| 282. 雷元隆 | 2 | 6 | 8 | 326. 增餘  | 2 | 4 | 6 |
| 283. 福興  | 5 | 2 | 7 | 327. 楊協興 | 4 | 2 | 6 |
| 284. 義昌  | 1 | 6 | 7 | 328. 錦順  | 2 | 4 | 6 |
| 285. 實業  | 1 | 6 | 7 | 329. 順昌興 | 3 | 3 | 6 |
| 286. 瑞新盛 | 3 | 4 | 7 | 330. 鴻大  | 2 | 4 | 6 |
| 287. 協大昌 | 3 | 4 | 7 | 331. 郁心記 | 1 | 5 | 6 |
| 288. 協成  | 2 | 5 | 7 | 332. 利泰  | 1 | 5 | 6 |
| 289. 流順  | 1 | 6 | 7 | 333. 和盛  | 3 | 3 | 6 |
| 290. 洪昶祥 | 3 | 4 | 7 | 334. 興記  | 3 | 3 | 6 |
| 271. 永昌  | — | 7 | 7 | 335. 合豐  | 3 | 3 | 6 |
| 292. 義成  | 3 | 4 | 7 | 336. 永泰  | 3 | 3 | 6 |
| 293. 美興  | 3 | 4 | 7 | 337. 合和  | 2 | 4 | 6 |
| 294. 沈順昌 | 2 | 5 | 7 | 338. 順昌祥 | 3 | 3 | 6 |
| 295. 董森記 | 2 | 5 | 7 | 339. 公大  | 3 | 3 | 6 |
| 296. 邢榮昌 | 4 | 3 | 7 | 340. 葆興  | 6 | — | 6 |
| 297. 陳鶴記 | 4 | 3 | 7 | 341. 公興發 | 3 | 3 | 6 |
| 298. 興生記 | 3 | 4 | 7 | 342. 盈昌  | 4 | 2 | 6 |

|          |   |   |   |          |       |       |       |
|----------|---|---|---|----------|-------|-------|-------|
| 343. 永利  | 3 | 3 | 6 | 382. 豐泰  | 2     | 2     | 4     |
| 344. 吳興祥 | 2 | 4 | 6 | 383. 華新生 | 3     | 1     | 4     |
| 345. 施新記 | 1 | 5 | 6 | 384. 萬生  | 4     | —     | 4     |
| 346. 明記  | 3 | 3 | 6 | 385. 仁昌  | 1     | 3     | 4     |
| 347. 振興  | 2 | 4 | 6 | 386. 洪昌  | 2     | 2     | 4     |
| 348. 德記  | 1 | 5 | 6 | 387. 倪明記 | 2     | 2     | 4     |
| 349. 協昌  | 2 | 4 | 6 | 388. 王錦記 | 2     | 2     | 4     |
| 350. 雲昌  | 3 | 3 | 6 | 389. 發昌  | —     | 4     | 4     |
| 351. 聚興  | — | 6 | 6 | 390. 遠東  | 2     | 2     | 4     |
| 352. 求興  | 3 | 2 | 5 | 391. 震泰  | 2     | 2     | 4     |
| 353. 華興  | 2 | 3 | 5 | 392. 楊順昌 | 2     | 2     | 4     |
| 354. 亨豐  | 2 | 3 | 5 | 393. 惠發  | 2     | 2     | 4     |
| 355. 興華  | 1 | 4 | 5 | 394. 曹發昌 | 1     | 3     | 4     |
| 356. 求利  | 2 | 3 | 5 | 395. 華泰  | 3     | 1     | 4     |
| 357. 天通  | 2 | 3 | 5 | 396. 鴻昌  | 1     | 3     | 4     |
| 358. 久興  | — | 5 | 5 | 397. 德昌  | 2     | 2     | 4     |
| 359. 孫榮昌 | 3 | 2 | 5 | 398. 凌順昌 | 1     | 3     | 4     |
| 360. 任萬昌 | 1 | 4 | 5 | 399. 友利  | 3     | 1     | 4     |
| 361. 公信  | 3 | 2 | 5 | 400. 牲泰  | 3     | —     | 3     |
| 362. 匯泰  | 3 | 2 | 5 | 401. 張順記 | 1     | 2     | 3     |
| 363. 合興  | 4 | 1 | 5 | 402. 三友  | 2     | 1     | 3     |
| 364. 春寶泰 | 2 | 3 | 5 | 403. 榮昌  | 2     | 1     | 3     |
| 365. 興榮  | 2 | 3 | 5 | 404. 顧順記 | —     | 3     | 3     |
| 366. 茂昌  | 2 | 3 | 5 | 405. 賀永記 | 2     | 1     | 3     |
| 367. 永順  | 1 | 4 | 5 | 406. 茂大  | 2     | 1     | 3     |
| 368. 久華  | 2 | 3 | 5 | 407. 鎮昌  | 2     | 1     | 3     |
| 369. 恆昌  | 1 | 4 | 5 | 408. 同康  | 2     | 1     | 3     |
| 370. 亨生  | 2 | 3 | 5 | 409. 勝達  | 2     | 1     | 3     |
| 371. 慶茂昌 | 3 | 2 | 5 | 410. 王傳記 | 1     | 2     | 3     |
| 372. 明昌  | 1 | 4 | 5 | 411. 永盛  | 1     | 2     | 3     |
| 373. 曹振昌 | 2 | 3 | 5 | 412. 震昌  | —     | 2     | 2     |
| 374. 發昌  | 2 | 3 | 5 | 413. 振利  | 1     | 1     | 2     |
| 375. 恆昌  | 1 | 4 | 5 | 414. 上南  | 2     | —     | 2     |
| 376. 東昌  | 3 | 2 | 5 | 415. 姚興昌 | 2     | —     | 2     |
| 377. 張裕泰 | 2 | 3 | 5 | 416. 恆昶  | 1     | 1     | 2     |
| 378. 裕生  | 1 | 4 | 5 | 417. 和昌  | 1     | 1     | 2     |
| 379. 有興  | 1 | 3 | 4 | 418. 錦和  | 1     | 1     | 2     |
| 380. 陸永昌 | 1 | 3 | 4 |          |       |       |       |
| 381. 榮昌  | 2 | 2 | 4 |          |       |       |       |
|          |   |   |   | 總計       | 5,834 | 2,978 | 8,812 |

## 說明

材料來源：

根據華德路銅鐵業同業公會報告，按照廠址調查。

實得廠數：

· 418 家

實得工人數：

8,812 人

估計廠數：

100 家

估計工人數：

943 人

估計方法：

依照銅鐵業同業公會名單，機器廠家僅 180 家，且無人數。十八年八月本局分區派員按照廠址調查，實得廠數凡 418 家，實得工人數 8,812 人。機器廠家，規模大者，調查尚易，規模小者，多在偏僻里弄內，尋找困難，遺漏在所難免，估計約有 100 家，其中滿三十人者至多 10 家，八人者 13 家，七人者 77 家，共計 943 人：內男工約占百分之六十六，童工約占百分之三十四，計得男工 621 人，童工 322 人，連同實得數計算本市機器工廠，共有 518 家，人數 9,755 人，內男工 6,455 人，童工 3,300 人。此外尚有一種修理汽車之工人，所做工作與機器工人相近，但既無一定製造場所，又無團體組織，調查無從入手，所有工人數從略。

第四表 IV. 交通用具目：造船業

| 廠名     | 工人數   |   |    |       | 廠名      | 工人數   |   |     |       |
|--------|-------|---|----|-------|---------|-------|---|-----|-------|
|        | 男     | 女 | 童  | 總     |         | 男     | 女 | 童   | 總     |
| 1. 瑞 鎔 | 3,291 |   | —  | 3,291 | 8. 鴻 昌  | 84    |   | 12  | 96    |
| 2. 江 南 | 1,027 |   | 84 | 1,111 | 9. 遠 大  | 55    |   | 25  | 80    |
| 3. 祥 生 | 510   |   | 50 | 560   | 10. 匯 昌 | 56    |   | 19  | 75    |
| 4. 求 新 | 368   |   | —  | 368   | 11. 順 昌 | 28    |   | 15  | 43    |
| 5. 耶 松 | 220   |   | —  | 220   | 12. 南 洋 | 12    |   | 9   | 21    |
| 6. 大中華 | 190   |   | —  | 190   | 13. 華 豐 | 3     |   | 5   | 8     |
| 7. 合 興 | 150   |   | 35 | 185   | 總 計     | 5,994 |   | 254 | 6,248 |

## 說 明

材料來源：

十八年八月本局派調查員調查

實得廠數：

13 家

實得工人數：

6,248 人

上列數字，僅以各廠長日工為限。包工因人數無定額，調查不能準確，故不列入。又季節變化和營業盛衰，對於人數的變動，亦很有關係，而以造船業為尤甚，春夏兩季，修船工作較忙，臨時雇用工人較多，秋冬兩季則較少。營業的盛衰當然要直接影響到雇工人數，上列數字，僅以調查月份情形為限。

第五表 V. 土石製造目：玻璃業

| 廠名     | 工人數 |   |     |     | 廠名      | 工人數   |   |       |       |
|--------|-----|---|-----|-----|---------|-------|---|-------|-------|
|        | 男   | 女 | 童   | 總   |         | 男     | 女 | 童     | 總     |
| 1. 協昌  | 205 |   | 103 | 308 | 17. 益成  | 25    |   | 44    | 69    |
| 2. 公益  | 125 |   | 142 | 267 | 18. 仁和  | 27    |   | 40    | 67    |
| 3. 寶山  | 176 |   | 87  | 263 | 19. 志成  | 43    |   | 23    | 66    |
| 4. 中華  | 91  |   | 84  | 175 | 20. 光明  | 49    |   | 15    | 64    |
| 5. 兩宜  | 65  |   | 95  | 160 | 21. 大昌  | 33    |   | 30    | 63    |
| 6. 同安  | 59  |   | 70  | 129 | 22. 謙益  | 34    |   | 27    | 61    |
| 7. 隆記  | 67  |   | 58  | 125 | 23. 三友  | 20    |   | 26    | 46    |
| 8. 鴻福  | 64  |   | 59  | 123 | 24. 榮發  | 19    |   | 27    | 46    |
| 9. 鴻記  | 66  |   | 57  | 123 | 25. 三共  | 28    |   | 17    | 45    |
| 10. 寶成 | 56  |   | 62  | 118 | 26. 上海  | 24    |   | 19    | 43    |
| 11. 漢錫 | 42  |   | 63  | 105 | 27. 同泰  | 20    |   | 23    | 43    |
| 12. 滋康 | 48  |   | 55  | 103 | 28. 廣和興 | 26    |   | 15    | 41    |
| 13. 同記 | 39  |   | 57  | 96  | 29. 浦東  | 17    |   | 16    | 33    |
| 14. 中明 | 35  |   | 53  | 88  | 30. 榮利  | 15    |   | —     | 15    |
| 15. 寶生 | 38  |   | 42  | 80  |         |       |   |       |       |
| 16. 謙泰 | 32  |   | 46  | 78  | 總計      | 1,588 |   | 1,455 | 3,043 |

說明

材料來源：

十八年八月本局派調查員調查

實得廠數：

30 家

實得工人數：

3,043 人

查本市玻璃製造業，近來不甚發達，加之同業之間競爭激烈，倒閉之事，時有所聞，以前該業工人，總數約在四千人以上，今則僅三千人而已。

第六表 VI. 化學工業目：製皂業

| 廠名     | 工人數 |     |   |     | 廠名     | 工人數 |     |   |       |
|--------|-----|-----|---|-----|--------|-----|-----|---|-------|
|        | 男   | 女   | 童 | 總   |        | 男   | 女   | 童 | 總     |
| 1. 中國  | 386 | 65  |   | 451 | 20. 信華 | 6   |     |   | 6     |
| 2. 五洲  | 141 | 122 |   | 263 | 21. 隆盛 | 6   |     |   | 6     |
| 3. 華豐  | 17  | 46  |   | 63  | 22. 蘭茂 | 5   |     |   | 5     |
| 4. 愛華  | 20  | 32  |   | 52  | 23. 大德 | 5   |     |   | 5     |
| 5. 中央  | 11  | 27  |   | 38  | 24. 公茂 | 4   |     |   | 4     |
| 6. 南陽  | 22  | 1   |   | 23  | 25. 天裕 | 4   |     |   | 4     |
| 7. 亨利  | 22  | —   |   | 22  | 26. 福隆 | 4   |     |   | 4     |
| 8. 新昌  | 19  | —   |   | 19  | 27. 正豐 | 4   |     |   | 4     |
| 9. 永和  | 12  | 6   |   | 18  | 28. 隆茂 | 4   |     |   | 4     |
| 10. 華興 | 12  | 6   |   | 18  | 29. 福昌 | 3   |     |   | 3     |
| 11. 鼎豐 | 13  | —   |   | 13  | 30. 三星 | 3   |     |   | 3     |
| 12. 怡茂 | 12  | —   |   | 12  | 31. 大華 | 3   |     |   | 3     |
| 13. 立大 | 8   | —   |   | 8   | 32. 山北 | 3   |     |   | 3     |
| 14. 裕茂 | 8   | —   |   | 8   | 33. 震記 | 2   |     |   | 2     |
| 15. 新中 | 8   | —   |   | 8   | 34. 振興 | 2   |     |   | 2     |
| 16. 華昌 | 7   | —   |   | 7   | 35. 民生 | 2   |     |   | 2     |
| 17. 祥民 | 7   | —   |   | 7   | 36. 錦昇 | 2   |     |   | 2     |
| 18. 光華 | 7   | —   |   | 7   |        |     |     |   |       |
| 19. 啓新 | 6   | —   |   | 6   | 總計     | 800 | 305 |   | 1,105 |

## 說明

材料來源：

十八年八月本局派調查員調查

實得廠數：

36 家

實得工人數：

1,105 人

第七表 VI. 化學工業目：火柴業

| 廠名      | 工人數 |     |     |     | 廠名    | 工人數 |       |     |       |
|---------|-----|-----|-----|-----|-------|-----|-------|-----|-------|
|         | 男   | 女   | 童   | 總   |       | 男   | 女     | 童   | 總     |
| 1. 榮昌第二 | 340 | 370 | 210 | 920 | 5. 華明 | 87  | 72    | 53  | 212   |
| 2. 中華   | 104 | 380 | 110 | 654 | 6. 大華 | 60  | 40    | 20  | 120   |
| 3. 榮昌第一 | 135 | 200 | 80  | 415 | 7. 上海 | 45  | 30    | 20  | 95    |
| 4. 利民   | 80  | 140 | 60  | 280 | 總計    | 911 | 1,232 | 553 | 2,696 |

## 說明

材料來源：

十八年八月本局派調查員按廠址調查

實得廠數：

7 家

實得工人數：

2,696 人

市內火柴廠凡 7 家，內中華火柴廠在周浦區，市府尚未正式接收，但已劃入本市行政區域範圍，該廠規模在火柴業內尚不為小，本局初辦工資調查時，即已供給材料，未嘗間斷，故此次調查，仍將該廠列入。



第八表 VI. 化學工業日：搪瓷業

| 廠名      | 工人數 |     |    |     | 廠名      | 工人數   |     |    |       |
|---------|-----|-----|----|-----|---------|-------|-----|----|-------|
|         | 男   | 女   | 童  | 總   |         | 男     | 女   | 童  | 總     |
| 1. 鑄豐   | 354 | 107 | 20 | 481 | 10. 永豐  | 55    | —   |    | 55    |
| 2. 益豐第二 | 345 | 66  | 42 | 453 | 11. 振誠興 | 50    | —   |    | 50    |
| 3. 華豐   | 320 | 80  | —  | 400 | 12. 求新  | 36    | 10  |    | 46    |
| 4. 月新   | 208 | 30  | 28 | 266 | 13. 協豐  | 30    | —   |    | 30    |
| 5. 中華第二 | 127 | 25  | —  | 152 | 14. 微微  | 28    | —   |    | 28    |
| 6. 廣大   | 90  | —   | —  | 90  | 15. 一友  | 18    | —   |    | 18    |
| 7. 中華第一 | 70  | 15  | —  | 85  | 16. 義豐  | 5     | —   |    | 5     |
| 8. 兆豐   | 61  | 20  | —  | 81  |         |       |     |    |       |
| 9. 益豐第一 | 60  | —   | —  | 60  | 總計      | 1,857 | 258 | 90 | 2,300 |

## 說明

材料來源：

十八年八月本局派調查員按廠址調查

實得廠數：

16 家

實得工人數：

2,300 人

第九表 VII. 紡織工業目：纜絲業

| 廠名      | 車數  | 車間長<br>工人數 | 車間益<br>工人數 | 兩共人數 | 廠名      | 車數  | 車間長<br>工人數 | 車間益<br>工人數 | 兩共人數 |
|---------|-----|------------|------------|------|---------|-----|------------|------------|------|
| 1. 寶泰   | 628 | 628        | 314        | 942  | 41. 協安  | 230 | 230        | 115        | 345  |
| 2. 瑞綸   | 630 | 600        | 300        | 900  | 42. 豫豐  | 228 | 228        | 114        | 342  |
| 3. 怡和   | 542 | 542        | 271        | 813  | 43. 恆隆  | 228 | 228        | 114        | 342  |
| 4. 信昌   | 536 | 536        | 268        | 804  | 44. 宏純  | 224 | 224        | 112        | 336  |
| 5. 鼎盛   | 512 | 512        | 256        | 768  | 45. 德康  | 224 | 224        | 112        | 336  |
| 6. 順豐   | 432 | 432        | 216        | 648  | 46. 衡康  | 224 | 224        | 112        | 336  |
| 7. 久成   | 416 | 416        | 208        | 624  | 47. 協豐  | 224 | 224        | 112        | 336  |
| 8. 豐泰源  | 416 | 416        | 208        | 624  | 48. 福餘  | 220 | 220        | 110        | 330  |
| 9. 廣源   | 352 | 352        | 176        | 528  | 49. 信成  | 216 | 216        | 108        | 324  |
| 10. 天昌  | 350 | 350        | 175        | 525  | 50. 新新  | 216 | 216        | 108        | 324  |
| 11. 天豐  | 344 | 344        | 172        | 516  | 51. 雲成  | 216 | 216        | 108        | 324  |
| 12. 寶經  | 333 | 338        | 169        | 507  | 52. 楚信  | 212 | 212        | 106        | 318  |
| 13. 統益  | 318 | 318        | 159        | 477  | 53. 慶豐  | 212 | 212        | 106        | 318  |
| 14. 鑫源隆 | 288 | 288        | 144        | 432  | 54. 利昌  | 208 | 208        | 104        | 312  |
| 15. 姓源  | 280 | 280        | 140        | 420  | 55. 天綸  | 208 | 208        | 104        | 312  |
| 16. 祥成  | 264 | 264        | 132        | 396  | 56. 勤昌  | 208 | 208        | 104        | 312  |
| 17. 安豫  | 260 | 260        | 130        | 390  | 57. 春美  | 208 | 208        | 104        | 312  |
| 18. 緒昌永 | 260 | 260        | 130        | 390  | 58. 永源  | 208 | 208        | 104        | 312  |
| 19. 泰來  | 260 | 260        | 130        | 390  | 59. 隆記  | 208 | 208        | 104        | 312  |
| 20. 有義  | 256 | 256        | 128        | 384  | 60. 元元  | 208 | 208        | 104        | 312  |
| 21. 天來  | 248 | 248        | 124        | 372  | 61. 鼎昌順 | 208 | 208        | 104        | 312  |
| 22. 啓昌泰 | 240 | 240        | 120        | 360  | 62. 緒昌順 | 208 | 208        | 104        | 312  |
| 23. 瑞豐餘 | 240 | 240        | 120        | 360  | 63. 恆昌新 | 208 | 208        | 104        | 312  |
| 24. 久大  | 240 | 240        | 120        | 360  | 64. 緒昌福 | 208 | 208        | 104        | 312  |
| 25. 盈豐  | 240 | 240        | 120        | 360  | 65. 同司福 | 208 | 208        | 104        | 312  |
| 26. 德豐  | 240 | 240        | 120        | 360  | 66. 同益  | 208 | 208        | 104        | 312  |
| 27. 鼎盛  | 240 | 240        | 120        | 360  | 67. 裕經  | 208 | 208        | 104        | 312  |
| 28. 寶綸  | 240 | 240        | 120        | 360  | 68. 通緯  | 208 | 208        | 104        | 312  |
| 29. 華慶順 | 240 | 240        | 120        | 360  | 69. 厚福  | 208 | 208        | 104        | 312  |
| 30. 啓昌永 | 240 | 240        | 120        | 360  | 70. 緯餘  | 208 | 208        | 104        | 312  |
| 31. 公益  | 240 | 240        | 120        | 360  | 71. 慎興  | 208 | 208        | 104        | 312  |
| 32. 振益  | 240 | 240        | 120        | 360  | 72. 同發  | 208 | 208        | 104        | 312  |
| 33. 晉泰  | 240 | 240        | 120        | 360  | 73. 鴻綸順 | 204 | 204        | 102        | 306  |
| 34. 駿盛福 | 240 | 240        | 120        | 360  | 74. 永昌  | 200 | 200        | 100        | 300  |
| 35. 利豐  | 240 | 240        | 120        | 360  | 75. 大豐成 | 200 | 200        | 100        | 300  |
| 36. 鴻綸  | 240 | 240        | 120        | 360  | 76. 益昌  | 200 | 200        | 100        | 300  |
| 37. 怡昌  | 238 | 238        | 119        | 357  | 77. 永綸  | 200 | 200        | 100        | 300  |
| 38. 同益  | 236 | 236        | 118        | 354  | 78. 盈餘  | 200 | 200        | 100        | 300  |
| 39. 裕綸  | 234 | 234        | 117        | 351  | 79. 大綸  | 200 | 200        | 100        | 300  |
| 40. 永慶興 | 234 | 234        | 117        | 351  | 80. 經綸  | 194 | 194        | 97         | 291  |

|                  |     |     |    |     |          |        |        |        |        |
|------------------|-----|-----|----|-----|----------|--------|--------|--------|--------|
| 81. 大來           | 192 | 192 | 96 | 288 | 96. 久盛   | 144    | 144    | 72     | 216    |
| 82. 緒興           | 192 | 192 | 96 | 288 | 97. 元綸   | 140    | 140    | 70     | 210    |
| 83. 綸祥           | 192 | 192 | 96 | 288 | 98. 新綸   | 140    | 140    | 70     | 210    |
| 84. {百司福<br>第綸二} | 184 | 184 | 92 | 276 | 99. 永大興  | 140    | 140    | 70     | 210    |
| 85. 綸大           | 184 | 184 | 92 | 276 | 100. 瑞和  | 136    | 136    | 68     | 204    |
| 86. 緒康           | 184 | 184 | 92 | 276 | 101. 祥和  | 136    | 136    | 68     | 204    |
| 87. 安泰           | 170 | 170 | 85 | 255 | 102. 協昌  | 128    | 128    | 64     | 192    |
| 88. 協興           | 160 | 160 | 80 | 240 | 103. 錦雲  | 128    | 128    | 64     | 192    |
| 89. 五豐           | 160 | 160 | 80 | 240 | 104. 鼎昌新 | 120    | 120    | 60     | 180    |
| 90. 裕昌           | 160 | 160 | 80 | 240 | 105. 興綸  | 108    | 108    | 54     | 162    |
| 91. 晉綸           | 160 | 160 | 80 | 240 | 106. 久豐  | 100    | 100    | 50     | 150    |
| 92. 瑞綸           | 160 | 160 | 80 | 240 | 107. 孚愼  | 70     | 70     | 35     | 105    |
| 93. 永源           | 158 | 158 | 79 | 237 |          |        |        |        |        |
| 94. 大綸           | 150 | 150 | 75 | 225 |          |        |        |        |        |
| 95. 恆大           | 144 | 144 | 72 | 216 |          |        |        |        |        |
|                  |     |     |    |     | 總計 107   | 24,906 | 24,906 | 12,453 | 37,359 |

## 說 明

材料來源：

根據上海北山西路上海特別市絲廠同業公會十八年五月調查同年八月本局調查員抽查。

實得廠數：

107 廠。

實得車數：

24,906 車。

估計方法：

絲廠同業公會所調查的僅廠數及車數。各廠抄繭、剝繭、扯吐、整絲以及司機雜務工人人數，均無記載。估計方法如下：

查絲廠慣例，每一車作一個半人計算（即每兩車僱用兩女工一盆工之謂），則 24,906 車當有女工 24,906 人，盆工 12,453 人。但這祇就車間工人而言，其他各間工人，則依據同業公會及各廠個別調查而決定一廠之平均數，估計如下：

各廠抄繭間平均 15 人

各廠剝繭間平均 30 人

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|           |      |
|-----------|------|
| 各廠車間替車平均  | 40 人 |
| 各廠扯吐間平均   | 15 人 |
| 各廠整絲間平均   | 15 人 |
| 各廠司機及雜務平均 | 16 人 |

除司機及雜務工人爲男工外，餘均屬女工。照此估計，各廠抄繭間，扯吐間，整絲間各有女工 1,605 人，剝繭間有女工 3,210 人，車間替車有 4,280 人，司機及雜務男工有 1,712 人。併同車間長工及盆工數計算，本市 107 廠，計有男工 1,712 人，女工 37,211 人，童工 12,453 人，總計 51,376 人。

第十表 VII. 紡織工業目：棉紡業

| 廠名         | 註一     | 註二    | 註三     | 廠名             | 註一      | 註二     | 註三      |
|------------|--------|-------|--------|----------------|---------|--------|---------|
|            | 原有人數   | 布機人數  | 實得人數   |                | 原有人數    | 布機人數   | 實得人數    |
| 華 廠        |        |       |        | 日 廠            |         |        |         |
| 1. 永安第二    | 4,000  | —     | 4,000  | 29} 喜和第一第二     | 5,560   | —      | 5,560   |
| 2. 統益      | 3,700  | —     | 3,700  | 30} 31. 大康     | 3,963   | —      | 3,963   |
| 3. 永安第三    | 3,740  | 240   | 3,500  | 32. 華豐         | 3,799   | —      | 3,799   |
| 4. 申新第一    | 4,604  | 1,110 | 3,494  | 33} 公大第一第二     | 5,600   | 2,000  | 3,600   |
| 5. 厚生      | 4,315  | 920   | 3,395  | 34} 35. 上海第三   | 4,119   | 1,052  | 3,077   |
| 6. 三新      | 4,200  | 1,000 | 3,200  | 36} 日華第三第四     | 3,070   | —      | 3,070   |
| 7. 恆豐      | 3,747  | 612   | 3,135  | 37} 38} 日華第一第二 | 3,542   | 500    | 3,042   |
| 8. 申新第七    | 3,144  | 446   | 2,698  | 39} 40. 豐田     | 3,900   | 960    | 2,940   |
| 9. 申新第二    | 2,400  | —     | 2,400  | 41. 上海第四       | 2,621   | —      | 2,621   |
| 10. 永安第一   | 3,400  | 1,070 | 2,330  | 42. 裕豐         | 2,330   | —      | 2,330   |
| 11. 崇新     | 2,300  | —     | 2,300  | 43. 東華         | 2,000   | —      | 2,000   |
| 12. 鴻章     | 2,277  | 216   | 2,061  | 44} 內外棉第五      | 1,800   | —      | 1,800   |
| 13. 大豐     | 2,180  | 224   | 1,956  | 45} (東西二廠)     | 1,670   | —      | 1,670   |
| 14. 申新第五   | 1,642  | —     | 1,642  | 46. 同興第一       | 1,400   | —      | 1,400   |
| 15. 緯通     | 1,557  | —     | 1,557  | 47. 內外棉第四      | 1,400   | —      | 1,400   |
| 16. 溥益第一   | 1,280  | —     | 1,280  | 48. 上海第一       | 1,866   | 664    | 1,202   |
| 17. 永豫     | 1,196  | —     | 1,196  | 49. 內外棉第十五     | 1,100   | —      | 1,100   |
| 18. 振泰     | 1,110  | —     | 1,110  | 50. 上海第二       | 1,616   | 582    | 1,034   |
| 19. 民生     | 1,000  | —     | 1,000  | 51. 同興第二       | 2,043   | 1,126  | 917     |
| 20. 恆大     | 970    | —     | 970    | 52. 內外棉第十三     | 900     | —      | 900     |
| 21. 振華     | 720    | —     | 720    | 53. 內外棉第十四     | 900     | —      | 900     |
| 22. 同昌     | 700    | —     | 700    | 54. 內外棉第三      | 750     | —      | 750     |
| 23. 溥益第二   | 1,129  | 500   | 629    | 55. 內外棉第八      | 700     | —      | 700     |
| 24. 隆茂     | 564    | —     | 564    | 56. 內外棉第九      | 1,400   | 800    | 600     |
| 25. 經緯     | 400    | —     | 400    | 57. 內外棉第十二     | 470     | —      | 470     |
| 26. 協豐     | 300    | —     | 300    | 58. 內外棉第十七     | 930     | 800    | 130     |
| 27. 寶興註四   | —      | —     | —      | 30             | 58,029  | 8,484  | 49,545  |
| 28. 申新第八註四 | —      | —     | —      | 英 廠            |         |        |         |
|            |        |       |        | 59} 怡和公益       | 13,000  | 1,900  | 11,100  |
|            |        |       |        | 60} 楊樹浦        |         |        |         |
|            |        |       |        | 61} 3          | 13,000  | 1,900  | 11,100  |
| 28         | 56,575 | 6,338 | 50,237 | 總計 61          | 127,634 | 16,722 | 110,882 |

## 說 明

上列材料係根據上海愛多亞路八十號華商紗廠聯合會十九年春季調查第九次訂正中國紗廠一覽表編製，同年五月本局調查員覆查，另行核算。

據華商紗廠聯合會調查全市紗廠人數：

|    |                    |
|----|--------------------|
| 華商 | 56,575 人           |
| 日商 | 58,029 人           |
| 英商 | 13,000 人           |
| 總計 | 127,604 人 (未除布機人數) |

本局將布機人數剔出，列入棉織業內計算，所以本局核計的實得人數要比聯合會計算的，少 16,722 人(一機雇用一人)，茲將紗廠布機數列後，以資參證：

|    |                              |
|----|------------------------------|
| 華商 | 6,338                        |
| 日商 | 8,484 (已除自動機 336 架——自動機不用人力) |
| 英商 | 1,900                        |
| 總計 | 16,722                       |

故本局核算實得人數為

|    |           |
|----|-----------|
| 華商 | 50,237 人  |
| 日商 | 49,545 人  |
| 英商 | 11,100 人  |
| 總計 | 110,882 人 |

又據本局十八年九月二十五日工資率調查，計查 19 廠，得男工 7,558 人，女工 27,574 人，童工 1,161 人，總計 36,293 人，化成百分數，男工佔 20.8%，女工 76.0%，童工 3.2%。若將本局核算實得全市棉紡業總人數依照上列百分比計算，則男女童工人數，分配如下：

|    |          |
|----|----------|
| 男工 | 23,064 人 |
| 女工 | 84,270 人 |
| 童工 | 3,548 人  |

總計 110,882 人

附紗線錠數：

|           | 紗錠             | 線錠           |
|-----------|----------------|--------------|
| <u>華商</u> | 918,098        | 43,688       |
| <u>日商</u> | 1,054,344      | 178,304      |
| <u>英商</u> | <u>153,320</u> | <u>1,900</u> |
| 總計        | 2,125,762      | 223,892      |

註一 原有人數係根據華商紗廠聯合會十九年春季調查第九次訂正中國紗廠一覽表所載人數。

註二 布機人數亦係根據該表所載布機數，一機作一人計算。

註三 實得人數，係每廠原有人數減布機人數而得。

註四 在籌備中，人數缺。

第十一表 VII. 紡織工業目：絲織業

| 廠名       | 工人數 |     |   |     | 廠名     | 工人數   |       |   |       |
|----------|-----|-----|---|-----|--------|-------|-------|---|-------|
|          | 男   | 女   | 童 | 總   |        | 男     | 女     | 童 | 總     |
| 1. 美亞總廠  | 295 | 271 |   | 566 | 26. 豐華 | 25    | 15    |   | 40    |
| 2. 物華    | 128 | 146 |   | 274 | 27. 閔行 | 30    | 5     |   | 35    |
| 3. 錦華    | 102 | 50  |   | 152 | 28. 利華 | 28    | 7     |   | 35    |
| 4. 美利    | 113 | 38  |   | 151 | 29. 大昌 | 26    | 8     |   | 34    |
| 5. 震華    | 109 | 23  |   | 132 | 30. 霞綸 | 23    | 11    |   | 34    |
| 6. 美亞二廠  | 102 | 29  |   | 131 | 31. 裕通 | 26    | 7     |   | 33    |
| 7. 錦雲    | 94  | 37  |   | 131 | 32. 廣成 | 23    | 9     |   | 32    |
| 8. 天倫總廠  | 94  | 36  |   | 130 | 33. 月華 | 20    | 10    |   | 30    |
| 9. 天衣    | 104 | 8   |   | 112 | 34. 寶華 | 21    | 9     |   | 30    |
| 10. 美成   | 76  | 27  |   | 103 | 35. 聯益 | 22    | 8     |   | 30    |
| 11. 國華   | 54  | 44  |   | 98  | 36. 新章 | 18    | 9     |   | 27    |
| 12. 友仁   | 83  | 14  |   | 97  | 37. 德昌 | 25    | 2     |   | 27    |
| 13. 天成   | 59  | 25  |   | 84  | 38. 志成 | 19    | 7     |   | 26    |
| 14. 金龍   | 49  | 22  |   | 71  | 39. 久華 | 17    | 6     |   | 23    |
| 15. 美孚   | 68  | 1   |   | 69  | 40. 錦成 | 20    | 3     |   | 23    |
| 16. 勝亞   | 26  | 41  |   | 67  | 41. 勝美 | 20    | 2     |   | 22    |
| 17. 美生   | 9   | 55  |   | 64  | 42. 鼎華 | 14    | 7     |   | 21    |
| 18. 天綸分廠 | 47  | 17  |   | 64  | 43. 達昌 | 8     | 8     |   | 16    |
| 19. 大華   | 40  | 10  |   | 50  | 44. 興華 | 8     | 7     |   | 15    |
| 20. 振業   | 32  | 15  |   | 47  | 45. 美華 | 11    | 3     |   | 14    |
| 21. 經緯   | 35  | 12  |   | 47  | 46. 廣美 | 9     | 2     |   | 11    |
| 22. 上海   | 37  | 8   |   | 45  | 47. 大華 | 10    | 1     |   | 11    |
| 23. 美文   | 35  | 9   |   | 44  | 48. 寶華 | 9     | 1     |   | 10    |
| 24. 光華   | 32  | 11  |   | 43  |        |       |       |   |       |
| 25. 信成   | 28  | 13  |   | 41  | 總計     | 2,283 | 1,109 |   | 3,392 |

說明

材料來源：

根據上海北京路一百號絲織同業公會調查，十八年八月本局調查員按照廠址覆查。

實得廠數：

48 家

實得工人數：

3,392 人



估計人數：

400 人

估計方法：

絲織同業公會調查，僅限會員廠家，而不入會的。據云尙有 20 家，惟規模極小，大約每廠平均可以作 20 人計算，20 廠估計約有 400 人，男工佔百分之七十，女工佔百分之三十，併同實得人數計算，本市絲織廠計有 68 家，工人有 3,792 人，內男工 2,563 人，女工 1,229 人。

第十二表 VII. 紡織工業目：棉織業

| 廠名       | 工人數 |     |     |      | 廠名     | 工人數 |    |   |    |
|----------|-----|-----|-----|------|--------|-----|----|---|----|
|          | 男   | 女   | 童   | 總    |        | 男   | 女  | 童 | 總  |
| 1. 友豐    | 990 | —   | 204 | 1194 | 41. 緒元 | 17  | 36 | — | 53 |
| 2. 達昌    | 329 | 230 | 21  | 580  | 42. 永豐 | 29  | 24 | — | 53 |
| 3. 祥昌    | 202 | 127 | —   | 329  | 43. 華章 | 29  | 20 | — | 49 |
| 4. 通和    | 10  | 289 | —   | 290  | 44. 竟成 | 16  | 32 | — | 48 |
| 5. 大餘    | 86  | 140 | —   | 226  | 45. 福成 | 2   | 43 | — | 45 |
| 6. 建華    | 70  | 136 | —   | 206  | 46. 寧新 | —   | 45 | — | 45 |
| 7. 廣生    | 40  | 160 | —   | 200  | 47. 華東 | 3   | 39 | — | 42 |
| 8. 大森    | 8   | 186 | —   | 194  | 48. 大陸 | 29  | 12 | — | 41 |
| 9. 正新    | 101 | 78  | —   | 179  | 49. 成業 | 21  | 20 | — | 41 |
| 10. 華陽   | 24  | 143 | —   | 167  | 50. 錦生 | 17  | 24 | — | 41 |
| 11. 光華   | —   | 163 | —   | 163  | 51. 仁和 | 13  | 27 | — | 40 |
| 12. 三新   | 65  | 98  | —   | 163  | 52. 達記 | —   | 40 | — | 40 |
| 13. 鴻新   | 94  | 59  | —   | 153  | 53. 義興 | 2   | 36 | — | 38 |
| 14. 公興   | 103 | 43  | —   | 146  | 54. 精勤 | 12  | 25 | — | 37 |
| 15. 鴻新   | 8   | 133 | —   | 141  | 55. 裕成 | 2   | 35 | — | 37 |
| 16. 大豐   | 68  | 68  | —   | 136  | 56. 新華 | 22  | 15 | — | 37 |
| 17. 中華第一 | 107 | —   | 27  | 134  | 57. 天華 | 3   | 34 | — | 37 |
| 18. 中華實業 | 49  | 83  | —   | 132  | 58. 三餘 | 24  | 13 | — | 37 |
| 19. 啓明   | 85  | 45  | —   | 130  | 59. 同昌 | 22  | 14 | — | 36 |
| 20. 瀛州   | 39  | 70  | —   | 109  | 60. 東樂 | 3   | 32 | — | 35 |
| 21. 鴻裕   | 36  | 71  | —   | 107  | 61. 成章 | 8   | 25 | — | 33 |
| 22. 羣生   | 63  | 34  | —   | 97   | 62. 圓圓 | 21  | 10 | — | 31 |
| 23. 恆裕   | 24  | 70  | —   | 94   | 63. 合興 | 21  | 7  | — | 28 |
| 24. 勤德   | 10  | 80  | —   | 90   | 64. 九章 | 15  | 13 | — | 28 |
| 25. 仁成   | 5   | 84  | —   | 89   | 65. 成聚 | 8   | 14 | 6 | 28 |
| 26. 三星   | 45  | 43  | —   | 88   | 66. 永盛 | 2   | 26 | — | 28 |
| 27. 大隆   | 8   | 74  | —   | 82   | 67. 中華 | 20  | 7  | — | 27 |
| 28. 德興   | 52  | 30  | —   | 82   | 68. 華隆 | —   | 25 | — | 25 |
| 29. 達生   | 28  | 53  | —   | 81   | 69. 振昶 | 8   | 15 | — | 23 |
| 30. 振和   | 2   | 79  | —   | 81   | 70. 恆豐 | 11  | 12 | — | 23 |
| 31. 三民   | 20  | 47  | 11  | 78   | 71. 永豐 | 15  | 7  | — | 22 |
| 32. 大順   | 2   | 74  | —   | 76   | 72. 裕民 | 1   | 20 | — | 21 |
| 33. 竟成   | 7   | 60  | —   | 67   | 73. 東記 | 11  | 10 | — | 21 |
| 34. 振豐   | 43  | 20  | —   | 63   | 74. 錦新 | 15  | 6  | — | 21 |
| 35. 兆豐   | 31  | 30  | —   | 61   | 75. 公興 | 10  | 10 | — | 20 |
| 36. 勝德   | 9   | 50  | —   | 59   | 76. 大順 | 4   | 16 | — | 20 |
| 37. 九福   | 19  | 39  | —   | 58   | 77. 永豐 | 13  | 6  | — | 19 |
| 38. 惠元   | 30  | 27  | —   | 57   | 78. 聚昌 | 14  | 5  | — | 19 |
| 39. 裕新   | 4   | 52  | —   | 56   | 79. 德興 | 10  | —  | 5 | 15 |
| 40. 順豐   | 13  | 43  | —   | 56   | 80. 德昌 | 11  | —  | 3 | 14 |

|        |    |    |   |    |         |       |       |     |       |
|--------|----|----|---|----|---------|-------|-------|-----|-------|
| 81.美華  | 10 | —  | 4 | 14 | 94.四義   | 6     | 2     | —   | 8     |
| 82.裕民一 | 7  | 7  | — | 14 | 95.泰豐   | 8     | —     | —   | 8     |
| 83.新德豐 | 6  | 8  | — | 14 | 96.張成泰  | 5     | —     | 3   | 8     |
| 84.大中  | 1  | 12 | — | 13 | 97.振泰   | 6     | 2     | —   | 8     |
| 85.莊協興 | 8  | 4  | — | 12 | 98.新豐   | 5     | 2     | —   | 7     |
| 86.福租  | 5  | 7  | — | 12 | 99.錦章   | 7     | —     | —   | 7     |
| 87.蔡裕興 | 6  | 6  | — | 12 | 100.義泰  | 5     | 2     | —   | 7     |
| 88.廣德  | 6  | —  | 5 | 11 | 101.宋順興 | 6     | —     | —   | 6     |
| 89.源泰  | 8  | —  | 3 | 11 | 102.瑞倫  | 2     | 4     | —   | 6     |
| 90.同豐  | 10 | —  | — | 10 | 103.源豐  | —     | —     | 6   | 6     |
| 91.鑫豐  | 6  | 3  | — | 9  | 104.義豐  | 1     | 5     | —   | 6     |
| 92.純華  | 6  | 2  | — | 8  | 105.成豐  | —     | —     | 5   | 5     |
| 93.中華  | 4  | 4  | — | 8  | 總計      | 3,547 | 4,172 | 303 | 8,022 |

## 說明

材料來源：

十八年八月本局派調查員按廠址調查。

實得廠數：

105 家

實得工人數：

8,022 人

本市織布工廠除上列 105 家外，尚有所謂「本廠布」廠。據本廠布公會報告，大約有 300 家，分散四處，甚或深處街坊，既無名單，又無地址，即使按路調查，亦難詳盡。茲據該會估計，此 300 家，有 3,000 機，每機可作一個半工人計算，總計有 4,500 人，男工有 3,000 人，女工有 1,500 人。

又本市紗廠亦有兼營織布工作者，據上海華商紗廠聯合會調查全市紗廠布機總計有 16,722 架，每機雇用女工一人（參閱第十表棉紡業說明）。

茲併同實際調查所得廠數及「本廠布」廠計算，本市統計有棉織廠家 405 家<sup>註一</sup>再將紗廠布機工人與實得人數及「本廠布」廠人數合併計算，本市棉織業工人有 29,244 人（內實得人數 8,022 人，「本廠布」廠 4,500 人，紗廠織布工人 16,722 人），內男工 6,547 人，女工 22,394 人，童工 303 人。

註一 紗廠也有分紡紗織布兩部者，但廠的單位，仍舊祇是一個，本表雖將紗廠中之工人數併入計算，但紗廠數並不列入。

第十三表 VII. 紡織工業目：針織業

| 廠名       | 工人數 |     |    |     | 廠名       | 工人數 |    |   |    |
|----------|-----|-----|----|-----|----------|-----|----|---|----|
|          | 男   | 女   | 童  | 總   |          | 男   | 女  | 童 | 總  |
| 1. 中華第一  | 146 | 586 | —  | 682 | 40. 純華   | —   | 63 | — | 63 |
| 2. 工足    | 184 | 280 | —  | 464 | 41. 中原   | 15  | 46 | — | 61 |
| 3. 振豐    | 104 | 280 | —  | 384 | 42. 裕康   | 17  | 41 | 3 | 61 |
| 4. 康泰    | 140 | 190 | —  | 330 | 43. 中源   | —   | 60 | — | 60 |
| 5. 人餘    | 118 | 196 | —  | 314 | 44. 愛國   | 18  | 42 | — | 60 |
| 6. 天華    | 25  | 230 | 13 | 268 | 45. 中一   | 8   | 51 | — | 59 |
| 7. 景綸    | 50  | 196 | 5  | 257 | 46. 恆興   | 13  | 41 | — | 54 |
| 8. 同濟第一  | 18  | 234 | 5  | 257 | 47. 久華   | —   | 52 | — | 52 |
| 9. 興祥    | 105 | 145 | —  | 250 | 48. 志成   | —   | 50 | — | 50 |
| 10. 鴻興   | —   | 193 | —  | 193 | 49. 精華   | 12  | 35 | 3 | 50 |
| 11. 大才   | 20  | 165 | —  | 185 | 50. 利昌   | 3   | 40 | 5 | 48 |
| 12. 三才   | 52  | 125 | —  | 177 | 51. 新昌   | 8   | 36 | 3 | 47 |
| 13. 久和   | 24  | 148 | —  | 172 | 52. 啟華   | 10  | 35 | — | 45 |
| 14. 振昌   | 75  | 92  | —  | 167 | 53. 乾大   | 11  | 30 | 3 | 44 |
| 15. 振藝   | 28  | 126 | 12 | 166 | 54. 華清   | —   | 44 | — | 44 |
| 16. 足安   | 60  | 105 | —  | 165 | 55. 聚豐   | 12  | 30 | — | 42 |
| 17. 上海第一 | 69  | 87  | 4  | 160 | 56. 然成   | 6   | 36 | — | 42 |
| 18. 久益   | 65  | 80  | 9  | 154 | 57. 志達   | —   | 39 | 2 | 41 |
| 19. 義和   | 48  | 93  | —  | 141 | 58. 天綸   | 9   | 32 | — | 41 |
| 20. 公利   | 56  | 81  | —  | 137 | 59. 正大   | 10  | 30 | — | 40 |
| 21. 啓昌   | —   | 119 | —  | 119 | 60. 品益   | —   | 40 | — | 40 |
| 22. 信成   | 42  | 75  | —  | 117 | 16. 振業   | 22  | 16 | — | 38 |
| 23. 富華   | 30  | 80  | —  | 110 | 62. 精勤   | 9   | 28 | — | 37 |
| 24. 源豐   | 13  | 95  | —  | 108 | 63. 惠福   | 5   | 30 | — | 35 |
| 25. 華綸   | 25  | 73  | 4  | 102 | 64. 合翠   | 16  | 14 | 4 | 34 |
| 26. 聯華   | 28  | 69  | 5  | 102 | 65. 裕豐   | 20  | 5  | 7 | 32 |
| 27. 萬生   | 20  | 80  | —  | 100 | 66. 達昌   | —   | 32 | — | 32 |
| 28. 五和   | 46  | 53  | —  | 99  | 67. 亞東   | 10  | 21 | — | 31 |
| 29. 怡豐   | 9   | 85  | 4  | 98  | 68. 乘成   | —   | 30 | — | 30 |
| 30. 永成   | 39  | 53  | —  | 92  | 69. 遠東   | —   | 30 | — | 30 |
| 31. 中興   | 6   | 82  | —  | 88  | 70. 裕民   | 5   | 24 | — | 29 |
| 32. 裕大   | 26  | 60  | —  | 86  | 71. 祥泰   | 25  | 4  | — | 29 |
| 33. 利華   | 66  | 14  | —  | 80  | 72. 中發   | —   | 28 | — | 28 |
| 34. 裕興   | 20  | 50  | 10 | 80  | 73. 大豐   | —   | 26 | — | 26 |
| 35. 榮陽   | 8   | 65  | 3  | 76  | 74. 同濟第二 | —   | 25 | — | 25 |
| 36. 進步   | 13  | 62  | —  | 75  | 75. 粵興   | —   | 25 | — | 25 |
| 37. 勤興   | 27  | 48  | —  | 75  | 76. 三聯   | 8   | 14 | — | 22 |
| 38. 祝華   | 30  | 45  | —  | 75  | 77. 祥豐   | 12  | 10 | — | 22 |
| 39. 南昌   | 28  | 32  | 8  | 68  | 78. 盛炳記  | 1   | 20 | — | 21 |

|        |    |    |   |    |         |       |       |     |       |
|--------|----|----|---|----|---------|-------|-------|-----|-------|
| 79. 祥雲 | 2  | 16 | 2 | 20 | 92. 時明  | 3     | 5     | 2   | 10    |
| 80. 金城 | 5  | 15 | — | 20 | 93. 緯通  | 4     | 6     | —   | 10    |
| 81. 振新 | 9  | 10 | — | 19 | 94. 惠然  | 2     | 5     | —   | 7     |
| 82. 建華 | 15 | 3  | — | 18 | 95. 鑫華  | —     | 7     | —   | 7     |
| 83. 益華 | —  | 18 | — | 18 | 96. 神州  | —     | 7     | —   | 7     |
| 84. 益大 | —  | 18 | — | 18 | 97. 競華  | 6     | —     | —   | 6     |
| 85. 瑩蔭 | 10 | 3  | 4 | 17 | 98. 華東  | 3     | 3     | —   | 6     |
| 86. 永利 | —  | 16 | — | 16 | 99. 友惠  | —     | —     | 5   | 5     |
| 87. 三友 | —  | 15 | — | 15 | 100. 匯華 | 3     | 2     | —   | 5     |
| 88. 公興 | —  | 12 | 2 | 14 | 101. 大達 | 2     | 1     | —   | 3     |
| 89. 亞東 | 6  | 8  | — | 14 | 102. 公盛 | 2     | —     | —   | 2     |
| 90. 新華 | 4  | 10 | — | 14 |         |       |       |     |       |
| 91. 勤勝 | 6  | 4  | 1 | 11 |         |       |       |     |       |
|        |    |    |   |    | 總計      | 2,236 | 6,261 | 128 | 8,625 |

## 說 明

材料來源：

根據上海特別市針織同業公會會員名冊按照廠址調查。

實得廠數：

102 廠

實得工人數：

8,625 人

估計廠數：

75 廠

估計工人數：

1,500 人

估計方法：

上海特別市針織同業公會會員名冊內，祇有 102 廠，未加入公會的，探詢各方面意見，估計有 75 家，依據調查經驗，每廠平均約有二十人，內男工佔百分之三十，女工佔百分之六十五，童工百分之五。75 廠計有 1,500 人，內男工 450 人，女工 975 人，童工 75 人，併同實得廠數及實得工人數計算，本市針織業工廠總計 177 廠，10,125 人，內男工 2,686 人，女工 7,236 人，童工 203 人。

第十四表 XII. 紡織工業目：漂染業

| 廠名       | 工人數 |   |   |     | 廠名       | 工人數   |   |   |       |
|----------|-----|---|---|-----|----------|-------|---|---|-------|
|          | 男   | 女 | 童 | 總   |          | 男     | 女 | 童 | 總     |
| 1. 綸昌    | 400 |   |   | 400 | 26. 達源   | 35    |   |   | 35    |
| 2. 光華    | 300 |   |   | 300 | 27. 義大第二 | 35    |   |   | 35    |
| 3. 達豐*   | 297 |   |   | 297 | 28. 勤大   | 35    |   |   | 35    |
| 4. 鴻章*   | 150 |   |   | 150 | 29. 仁大   | 35    |   |   | 35    |
| 5. 三友*   | 144 |   |   | 144 | 30. 精勤   | 32    |   |   | 32    |
| 6. 錦華    | 100 |   |   | 100 | 31. 協豐   | 30    |   |   | 30    |
| 7. 泰森*   | 68  |   |   | 68  | 32. 公大   | 29    |   |   | 29    |
| 8. 啟明*   | 61  |   |   | 61  | 33. 振業   | 29    |   |   | 29    |
| 9. 建華    | 60  |   |   | 60  | 34. 萬生   | 29    |   |   | 29    |
| 10. 潤勤*  | 59  |   |   | 59  | 35. 萬興   | 28    |   |   | 28    |
| 11. 德興*  | 58  |   |   | 58  | 36. 興茂   | 27    |   |   | 27    |
| 12. 大新   | 56  |   |   | 56  | 37. 勤昌   | 26    |   |   | 26    |
| 13. 信大   | 54  |   |   | 54  | 38. 華昌   | 25    |   |   | 25    |
| 14. 德大   | 54  |   |   | 54  | 39. 裕昌   | 25    |   |   | 25    |
| 15. 同德   | 54  |   |   | 54  | 40. 永和   | 25    |   |   | 25    |
| 16. 洪大   | 51  |   |   | 51  | 41. 祥餘第一 | 24    |   |   | 24    |
| 17. 大和   | 49  |   |   | 49  | 42. 東昇   | 22    |   |   | 22    |
| 18. 協成   | 49  |   |   | 49  | 43. 永裕   | 19    |   |   | 19    |
| 19. 緯明   | 44  |   |   | 44  | 44. 益興   | 19    |   |   | 19    |
| 20. 振工   | 42  |   |   | 42  | 45. 祥餘第二 | 18    |   |   | 18    |
| 21. 協記   | 41  |   |   | 41  | 46. 華陽*  | 13    |   |   | 13    |
| 22. 餘大   | 38  |   |   | 38  | 47. 公記   | 12    |   |   | 12    |
| 23. 協興   | 36  |   |   | 36  | 48. 大隆*  | 6     |   |   | 6     |
| 24. 義大第一 | 36  |   |   | 36  |          |       |   |   |       |
| 25. 公昌   | 35  |   |   | 35  | 總計       | 2,914 |   |   | 2,914 |

說明

材料來源：

十八年八月本局派調查員調查

實得廠數：

48 家

實得工人數：

2,914 人

本市漂染廠家，有以「廠」名者，亦有以「坊」名者，前者用機器，後者用人工，間或兼用一兩部機器，本表不但把完全用機器的漂染廠家列入，那些用一部或兩部機器的染坊，也調查來，但是嚴格說起來，不到此數，因為表中有符號\*的廠家，兼營棉織業。現在連同棉織廠家中之漂染工人合併計算，實得 2,914 人。

第十五表 XIII. 皮革品目：製革業

| 廠名      | 工人數 |   |    |     | 廠名      | 工人數 |   |    |    |
|---------|-----|---|----|-----|---------|-----|---|----|----|
|         | 男   | 女 | 童  | 總   |         | 男   | 女 | 童  | 總  |
| 1. 中華   | 99  | 2 | 8  | 104 | 40. 劉順記 | 10  |   | 8  | 18 |
| 2. 大華   | 100 |   | —  | 100 | 41. 三益  | 19  |   | 8  | 13 |
| 3. 江南   | 97  |   | —  | 97  | 42. 杜福興 | 2   |   | 10 | 12 |
| 4. 精益分廠 | 82  |   | —  | 82  | 43. 王順興 | 6   |   | 5  | 11 |
| 5. 東信   | 55  |   | —  | 55  | 44. 福佑泰 | 8   |   | 3  | 11 |
| 6. 上海   | 54  |   | —  | 54  | 45. 裕隆  | 13  |   | —  | 10 |
| 7. 源海   | 28  |   | 15 | 43  | 46. 同義昌 | 10  |   | —  | 10 |
| 8. 同利源  | 38  |   | 4  | 42  | 47. 森泰  | 3   |   | 7  | 10 |
| 9. 協源昌  | 35  |   | 4  | 39  | 48. 祥泰  | 7   |   | 8  | 10 |
| 10. 精益  | 38  |   | —  | 38  | 49. 張銀記 | 7   |   | 8  | 10 |
| 11. 信昌  | 30  |   | 8  | 38  | 50. 源泰昌 | 10  |   | —  | 10 |
| 12. 喊士  | 35  |   | —  | 35  | 51. 陳振興 | 9   |   | —  | 9  |
| 13. 老永森 | 34  |   | —  | 34  | 52. 開北  | 9   |   | —  | 9  |
| 14. 大南洲 | 32  |   | —  | 32  | 53. 源姓  | 8   |   | —  | 8  |
| 15. 亞洲  | 30  |   | —  | 30  | 54. 許永興 | 8   |   | —  | 8  |
| 16. 許源記 | 28  |   | —  | 28  | 55. 慎昌  | 8   |   | —  | 8  |
| 17. 大益  | 25  |   | —  | 25  | 56. 南洋  | 8   |   | —  | 8  |
| 18. 粵商  | 25  |   | —  | 25  | 57. 王根興 | 5   |   | 8  | 8  |
| 19. 呂全記 | 20  |   | 4  | 24  | 58. 許德順 | 8   |   | 5  | 8  |
| 20. 呂發記 | 15  |   | 9  | 24  | 59. 新祥泰 | 7   |   | 1  | 8  |
| 21. 東華  | 23  |   | —  | 23  | 60. 許源記 | 8   |   | —  | 8  |
| 22. 金燮記 | 23  |   | —  | 23  | 61. 孫洪記 | 4   |   | 4  | 8  |
| 23. 廣誠  | 17  |   | 4  | 21  | 62. 劉恆記 | 5   |   | 3  | 8  |
| 24. 福和  | 20  |   | —  | 20  | 63. 德泰  | 7   |   | 1  | 8  |
| 25. 孫榮記 | 20  |   | —  | 20  | 64. 成發  | 8   |   | —  | 8  |
| 26. 華東  | 18  |   | 1  | 19  | 65. 閻義興 | 2   |   | 5  | 7  |
| 27. 慎安  | 14  |   | 8  | 17  | 66. 葉生大 | 3   |   | 4  | 7  |
| 28. 金有記 | 14  |   | 3  | 17  | 67. 許全記 | 8   |   | 4  | 7  |
| 29. 新記  | 12  |   | 5  | 17  | 68. 劉德記 | 3   |   | 4  | 7  |
| 30. 孫源記 | 8   |   | 8  | 16  | 69. 源豐  | 7   |   | —  | 7  |
| 31. 元興  | 14  |   | 2  | 16  | 70. 金鴻記 | 3   |   | 4  | 7  |
| 32. 永興  | 18  |   | 8  | 16  | 71. 王裕興 | 2   |   | 5  | 7  |
| 33. 祥生  | 14  |   | —  | 14  | 72. 恆業  | 6   |   | —  | 6  |
| 34. 高祥記 | 14  |   | —  | 14  | 73. 華興  | 6   |   | —  | 6  |
| 35. 南華  | 12  |   | 2  | 14  | 74. 呂才記 | 4   |   | 2  | 6  |
| 36. 恆勝  | 10  |   | 4  | 14  | 75. 陶義隆 | 4   |   | 2  | 6  |
| 37. 信孚  | 14  |   | —  | 14  | 76. 陳慶記 | 6   |   | —  | 6  |
| 38. 裕興  | 18  |   | —  | 18  | 77. 陳德記 | 4   |   | 2  | 6  |
| 39. 公興  | 7   |   | 6  | 13  | 78. 徐福記 | 4   |   | 2  | 6  |



|         |   |   |   |         |       |   |       |
|---------|---|---|---|---------|-------|---|-------|
| 79.袁天泰  | 6 | — | 6 | 116.萬福記 | 3     | — | 3     |
| 80.孫德興  | 1 | 5 | 6 | 117.吳福記 | 1     | 2 | 3     |
| 81.湯永記  | 2 | 4 | 6 | 118.袁龍興 | 3     | — | 3     |
| 82.樊順興  | 3 | 3 | 6 | 119.韓裕茂 | 3     | — | 3     |
| 83.隆昌   | 5 | — | 5 | 120.林發記 | 2     | 1 | 3     |
| 84.戴順記  | 1 | 4 | 5 | 121.季源昌 | 1     | 2 | 3     |
| 85.協記   | 2 | 3 | 5 | 122.永康祥 | 2     | 1 | 3     |
| 86.任源興  | 2 | 3 | 5 | 123.徐富昌 | 2     | 1 | 3     |
| 87.金鴻記  | 2 | 3 | 5 | 124.張興記 | 2     | 1 | 3     |
| 88.李錦記  | 1 | 4 | 5 | 125.聚興  | 1     | 2 | 3     |
| 89.馬榮記  | 2 | 3 | 5 | 126.陳源興 | 1     | 2 | 3     |
| 90.徐富昌  | 2 | 3 | 5 | 127.鄭天源 | 2     | 1 | 3     |
| 91.錢信大  | 1 | 4 | 5 | 128.王德大 | 2     | 1 | 3     |
| 92.長興   | 1 | 4 | 5 | 129.華春元 | 1     | 2 | 3     |
| 93.任同興  | 3 | 2 | 5 | 130.許慶記 | 1     | 2 | 3     |
| 94.趙森記  | 2 | 3 | 5 | 131.王寶素 | 2     | 1 | 3     |
| 95.義興   | 1 | 4 | 5 | 132.同興昌 | 2     | 1 | 3     |
| 96.合記   | 4 | — | 4 | 133.汪裕祀 | 2     | 1 | 3     |
| 97.張發記  | 2 | 2 | 4 | 134.中川  | 2     | 1 | 3     |
| 98.任順記  | 1 | 3 | 4 | 135.工商  | 2     | 1 | 3     |
| 99.全發記  | 2 | 2 | 4 | 136.振華  | 2     | — | 2     |
| 100.夏源記 | 2 | 2 | 4 | 137.福興公 | 2     | — | 2     |
| 101.合興  | 2 | 2 | 4 | 138.茅祖興 | 1     | 1 | 2     |
| 102.董順泰 | 1 | 3 | 4 | 139.徐興記 | 1     | 1 | 2     |
| 103.孫財富 | 2 | 2 | 4 | 140.朱益大 | 1     | 1 | 2     |
| 104.瑞源  | 2 | 2 | 4 | 141.王協豐 | 2     | — | 2     |
| 105.胡寶興 | 4 | — | 4 | 142.居來發 | 1     | 1 | 2     |
| 106.孔生記 | 1 | 3 | 4 | 143.宴順興 | 2     | — | 2     |
| 107.劉行生 | 2 | 2 | 4 | 144.謝同興 | 1     | 1 | 2     |
| 108.江全記 | 2 | 2 | 4 | 145.李富記 | 1     | 1 | 2     |
| 109.許洪記 | 2 | 2 | 4 | 146.錦新興 | 2     | — | 2     |
| 110.王福泰 | 2 | 2 | 4 | 147.徐同興 | 2     | — | 2     |
| 111.王根記 | 1 | 3 | 4 | 148.張興記 | 2     | — | 2     |
| 112.同順興 | 1 | 2 | 3 | 149.陳餘記 | 1     | 1 | 2     |
| 113.許復記 | 3 | — | 3 | 150.陶裕隆 | 2     | — | 2     |
| 114.許順興 | 1 | 2 | 3 |         |       |   |       |
| 115.任森記 | 1 | 2 | 3 |         |       |   |       |
|         |   |   |   | 總計      | 1,552 | 2 | 296   |
|         |   |   |   |         |       |   | 1,850 |

說明

材料來源：

本局派員按照廠址調查。

實得廠數：

150 家

實得工人數：

1,850 人

本市製革工廠，規模較大者僅十餘家，餘均屬小廠。各廠均以男工為主體工人，童工次要，女工僅中華製革廠有兩名，他廠全無。

第十六表 IX. 飲食品目：麵粉業

| 廠 名     | 工 人 數 |   |   |     | 廠 名       | 工 人 數 |   |   |       |
|---------|-------|---|---|-----|-----------|-------|---|---|-------|
|         | 男     | 女 | 童 | 總   |           | 男     | 女 | 童 | 總     |
| 1. 福新第二 | 320   |   |   | 320 | 8. 福新第一   | 120   |   |   | 120   |
| 2. 福新第八 | 320   |   |   | 320 | 9. 申 大    | 120   |   |   | 120   |
| 3. 福新第七 | 320   |   |   | 320 | 10. 福新第三  | 104   |   |   | 104   |
| 4. 裕 通  | 160   |   |   | 160 | 11. 中 華   | 87    |   |   | 87    |
| 5. 阜 豐  | 150   |   |   | 150 | 12. 福新第六  | 80    |   |   | 80    |
| 6. 信 大  | 145   |   |   | 145 | 13. 祥 新 泰 | 56    |   |   | 56    |
| 7. 華 豐  | 130   |   |   | 130 | 總 計       | 2,112 |   |   | 2,112 |

## 說 明

材料來源：

十八年八月本局派調查員調查。

實得廠數：

13 家

實得工人數：

2,112 人

查麵粉業廠家，純用機器製造，廠家規模雖大，而所雇工人不多，並且這種工人都是小工，用不到什麼技能，所以本市雖然有十三個大麵粉工廠，而工人數也不過兩千多人。

第十七表 IX. 飲食品目：榨油業

| 廠名       | 工人數 |   |   |     | 廠名      | 工人數   |   |   |       |
|----------|-----|---|---|-----|---------|-------|---|---|-------|
|          | 男   | 女 | 童 | 總   |         | 男     | 女 | 童 | 總     |
| 1. 生和隆第一 | 500 |   |   | 500 | 7. 旗昌源  | 120   |   |   | 120   |
| 2. 生和隆第二 | 500 |   |   | 500 | 8. 昌記   | 101   |   |   | 101   |
| 3. 穗豐新   | 184 |   |   | 184 | 9. 大有餘  | 97    |   |   | 97    |
| 4. 順餘第一  | 123 |   |   | 123 | 10. 大德新 | 86    |   |   | 86    |
| 5. 順餘第二  | 122 |   |   | 122 | 11. 同昌  | 48    |   |   | 48    |
| 6. 立德    | 120 |   |   | 120 | 總計      | 1,951 |   |   | 1,951 |

## 說明

生和隆一二廠係老式廠家，因不用機器製造，故所雇工人較他廠為獨多。

第十八表 IX. 飲食品目：製蛋業

| 廠 名     | 工 人 數 |     |   |     | 廠 名     | 工 人 數 |       |   |       |
|---------|-------|-----|---|-----|---------|-------|-------|---|-------|
|         | 男     | 女   | 童 | 總   |         | 男     | 女     | 童 | 總     |
| 1. 茂昌第二 | 299   | 623 |   | 922 | 5. 怡 和  | 195   | 302   |   | 497   |
| 2. 班 達  | 291   | 480 |   | 771 | 6. 茂昌第一 | 54    | 116   |   | 170   |
| 3. 培 林  | 250   | 350 |   | 600 | 7. 和 興  | 12    | 20    |   | 32    |
| 4. 海 寧  | 298   | 295 |   | 593 | 總 計     | 1,399 | 2,186 |   | 3,585 |

## 說 明

材料來源：

十八年八月本局派調查員調查。

實得廠數：

7 家

實得工人數：

3,585 人

第十九表 IX. 飲食品目：烟草業

| 廠名      | 工人數   |       |       |       | 廠名       | 工人數   |        |       |        |
|---------|-------|-------|-------|-------|----------|-------|--------|-------|--------|
|         | 男     | 女     | 童     | 總     |          | 男     | 女      | 童     | 總      |
| 1. 英美   | 4,162 | 3,455 | 1,259 | 8,876 | 38. 華達分廠 | 20    | 80     |       | 100    |
| 2. 南洋   | 613   | 1,841 |       | 2,454 | 39. 大得利  | 20    | 80     |       | 100    |
| 3. 華成   | 400   | 1,400 |       | 1,800 | 40. 崑崙   | 18    | 80     |       | 98     |
| 4. 花旗   | 325   | 956   |       | 1,281 | 41. 合成   | 17    | 70     |       | 87     |
| 5. 華達   | 80    | 500   |       | 580   | 42. 華品   | 30    | 50     |       | 80     |
| 6. 和興   | 130   | 300   |       | 430   | 43. 東海   | 7     | 70     |       | 77     |
| 7. 三興   | 77    | 340   |       | 417   | 44. 西門   | 11    | 60     |       | 71     |
| 8. 中南   | 56    | 320   |       | 376   | 45. 昌大   | 20    | 50     |       | 70     |
| 9. 華商   | 50    | 298   |       | 348   | 46. 人和   | 4     | 60     |       | 64     |
| 10. 中原  | 40    | 300   |       | 340   | 47. 唯一   | 12    | 50     |       | 62     |
| 11. 中和  | 50    | 250   |       | 300   | 48. 聯益   | 12    | 50     |       | 62     |
| 12. 大東南 | 32    | 250   |       | 282   | 49. 天香   | 10    | 50     |       | 60     |
| 13. 福新  | 80    | 200   |       | 280   | 50. 友利   | 9     | 50     |       | 59     |
| 14. 華慶  | 64    | 192   |       | 256   | 51. 裕新   | 10    | 48     |       | 58     |
| 15. 大東  | 31    | 220   |       | 251   | 52. 裕華   | 6     | 48     |       | 54     |
| 16. 三友  | 50    | 200   |       | 250   | 53. 寧台   | 14    | 40     |       | 54     |
| 17. 華東  | 60    | 190   |       | 250   | 54. 涼州   | 12    | 49     |       | 52     |
| 18. 民衆  | 58    | 187   |       | 245   | 55. 企美   | 8     | 40     |       | 48     |
| 19. 新民  | 40    | 200   |       | 240   | 56. 友益   | 7     | 40     |       | 47     |
| 20. 昌明  | 20    | 200   |       | 229   | 57. 合組   | 7     | 40     |       | 47     |
| 21. 昌興  | 70    | 150   |       | 220   | 58. 華興   | 15    | 30     |       | 45     |
| 22. 羣益  | 50    | 148   |       | 198   | 59. 南材   | 14    | 30     |       | 44     |
| 23. 新華  | 26    | 170   |       | 196   | 60. 主義   | 3     | 40     |       | 43     |
| 24. 瑞倫  | 30    | 160   |       | 190   | 61. 大統   | 7     | 35     |       | 42     |
| 25. 利興  | 30    | 150   |       | 180   | 62. 四福   | 12    | 30     |       | 42     |
| 26. 江浙  | 30    | 150   |       | 180   | 63. 大有   | 6     | 35     |       | 41     |
| 27. 江達  | 30    | 150   |       | 180   | 64. 華倫   | 5     | 35     |       | 40     |
| 28. 太達  | 26    | 150   |       | 176   | 65. 福星   | 10    | 30     |       | 40     |
| 29. 華昇  | 30    | 144   |       | 174   | 66. 德華   | 5     | 30     |       | 35     |
| 30. 民生  | 16    | 150   |       | 166   | 67. 德豐   | 5     | 30     |       | 35     |
| 31. 龍飛  | 35    | 130   |       | 165   | 68. 南海   | 3     | 25     |       | 28     |
| 32. 德隆  | 12    | 150   |       | 162   | 69. 美星   | 3     | 25     |       | 28     |
| 33. 信遠  | 18    | 130   |       | 148   | 70. 寶大   | 4     | 20     |       | 24     |
| 34. 福昌  | 43    | 89    |       | 132   | 71. 克富   | 5     | 18     |       | 23     |
| 35. 華德  | 30    | 100   |       | 130   | 72. 德榮   | 6     | 15     |       | 21     |
| 26. 永泰  | 20    | 90    |       | 110   |          |       |        |       |        |
| 37. 公平  | 25    | 78    |       | 103   | 總計       | 7,296 | 15,612 | 1,259 | 24,167 |

說明

材料來源：

根據上海西藏路平樂里上海捲烟廠同業公會調查，十八年八月本局派員按照廠址覆查。

實得廠數：

72 廠

實得工人數：

24,167 人

估計廠數：

18 廠

估計人數：

130 人

估計方法：

據捲烟廠同業公會調查，已加入公會之廠家計有 72 家，工友計 24,167 人，內男工 7,296 人，女工 15,612 人，童工 1,259 人。未加入公會的估計有 18 家，其中捲烟廠 4 家，每家平均有 15 人，共計 60 人，雪茄烟廠 14 家，每家平均 5 人（因規模極小）共計 70 人，兩共 130 人，男工佔十分之三，女工佔十分之七，連同實得廠數工人數計算，本市烟草廠家總計 90 家，工人總計 24,297 人，內男工 7,335 人，女工 15,703 人，童工 1,259 人。

第二十表 X. 造紙印刷目：造紙業

| 廠名     | 工人數 |     |   |     | 廠名     | 工人數 |     |   |       |
|--------|-----|-----|---|-----|--------|-----|-----|---|-------|
|        | 男   | 女   | 童 | 總   |        | 男   | 女   | 童 | 總     |
| 1. 龍章  | 182 | 330 |   | 512 | 5. 天章西 | 84  | 60  |   | 144   |
| 2. 天章東 | 199 | 230 |   | 429 | 6. 寶山  | 50  | 14  |   | 64    |
| 3. 江南  | 199 | 10  |   | 209 | 7. 源泰  | 41  | 7   |   | 48    |
| 4. 竟成  | 117 | 30  |   | 147 | 總計     | 872 | 681 |   | 1,553 |

## 說明

材料來源：

十八年八月本局派調查員按廠址調查。

實得廠數：

7 家

實得工人數：

1,553 人



第二十一表 X 造紙印刷目：印刷業

| 廠名     | 工人數   |     |     |       | 廠名     | 工人數 |   |    |    |
|--------|-------|-----|-----|-------|--------|-----|---|----|----|
|        | 男     | 女   | 童   | 總     |        | 男   | 女 | 童  | 總  |
| 1.商務   | 1,242 | 186 | 160 | 1,588 | 49.吳永記 | 41  |   | 13 | 54 |
| 2.中華   | 527   | 12  | 112 | 651   | 41.利國  | 41  |   | 11 | 52 |
| 3.中國橡皮 | 320   | 63  | —   | 383   | 42.大華  | 32  |   | 19 | 51 |
| 4.康元   | 130   | 25  | 95  | 250   | 43.中外  | 23  |   | 27 | 50 |
| 5.上海   | 194   | 4   | 20  | 218   | 44.徐勝記 | 32  |   | 18 | 50 |
| 6.世界   | 152   | 15  | 38  | 205   | 45.天寶  | 37  |   | 12 | 49 |
| 7.大東   | 97    | 53  | 35  | 185   | 46.順興  | 40  |   | 8  | 48 |
| 8.天一   | 80    | 30  | 50  | 160   | 47.文明  | 31  |   | 17 | 48 |
| 9.華成   | 95    | 15  | 40  | 150   | 48.太平洋 | 35  |   | 12 | 47 |
| 10.朱錦堂 | 115   | —   | 25  | 140   | 49.大成  | 34  |   | 13 | 47 |
| 11.別發  | 102   | 6   | 30  | 138   | 50.章福記 | 35  |   | 12 | 47 |
| 12.商文  | 89    | 4   | 25  | 118   | 51.共和  | 36  |   | 10 | 46 |
| 13.商業  | 87    | 5   | 21  | 113   | 52.遠東  | 32  |   | 14 | 46 |
| 14.盧澤  | 69    | —   | 33  | 102   | 53.東新  | 34  |   | 12 | 46 |
| 15.世界  | 84    | —   | 18  | 102   | 54.大生  | 35  |   | 10 | 45 |
| 16.美華  | 75    | 4   | 22  | 101   | 55.新新  | 33  |   | 12 | 45 |
| 17.遠東  | 65    | 8   | 20  | 93    | 56.光華  | 30  |   | 15 | 45 |
| 18.錦章  | 77    |     | 15  | 92    | 57.義興  | 33  |   | 11 | 44 |
| 19.文華  | 71    |     | 15  | 86    | 58.進益  | 31  |   | 13 | 44 |
| 20.協成  | 62    |     | 17  | 79    | 59.天成  | 33  |   | 10 | 43 |
| 21.洪興  | 37    |     | 40  | 77    | 60.聯益  | 31  |   | 12 | 43 |
| 22.中華  | 55    |     | 20  | 75    | 61.華大  | 21  |   | 22 | 43 |
| 23.鴻寶齋 | 56    |     | 17  | 73    | 62.共和新 | 30  |   | 12 | 42 |
| 24.東興  | 58    |     | 15  | 73    | 63.順利  | 31  |   | 11 | 42 |
| 25.義利  | 57    |     | 16  | 73    | 64.南洋  | 30  |   | 12 | 42 |
| 26.新業  | 59    |     | 14  | 73    | 65.新國民 | 18  |   | 24 | 42 |
| 27.人文  | 40    |     | 29  | 69    | 66.成業  | 31  |   | 10 | 41 |
| 28.國民  | 58    |     | 9   | 67    | 67.啓智  | 34  |   | 7  | 41 |
| 29.神州  | 52    |     | 10  | 62    | 68.業成  | 31  |   | 9  | 40 |
| 30.文瑞  | 46    |     | 16  | 62    | 69.國光  | 28  |   | 12 | 40 |
| 31.商文  | 47    |     | 15  | 62    | 70.昌明  | 31  |   | 9  | 40 |
| 32.法興  | 45    |     | 15  | 60    | 71.胡森記 | 27  |   | 12 | 39 |
| 33.正大  | 39    |     | 20  | 59    | 72.崇文  | 27  |   | 11 | 38 |
| 34.會文堂 | 46    |     | 13  | 59    | 73.老怡順 | 28  |   | 8  | 36 |
| 35.協興  | 49    |     | 8   | 57    | 74.新怡順 | 18  |   | 18 | 36 |
| 36.美生  | 44    |     | 13  | 57    | 75.華洋  | 27  |   | 9  | 36 |
| 37.新怡順 | 43    |     | 14  | 57    | 76.申新  | 26  |   | 10 | 36 |
| 38.希美  | 27    |     | 30  | 57    | 77.斐章  | 26  |   | 9  | 35 |
| 39.順興  | 40    |     | 14  | 54    | 78.華勝  | 25  |   | 10 | 35 |

|         |    |    |    |         |    |    |    |
|---------|----|----|----|---------|----|----|----|
| 79.良友   | 26 | 9  | 35 | 123.振興  | 16 | 6  | 22 |
| 80.中西   | 28 | 7  | 35 | 124.聯泰  | 16 | 6  | 22 |
| 81.大利   | 24 | 11 | 35 | 125.中央  | 13 | 8  | 21 |
| 82.新國民  | 19 | 15 | 34 | 126.升昌  | 15 | 6  | 21 |
| 83.昇發   | 23 | 10 | 33 | 127.錦商  | 6  | 15 | 21 |
| 84.達國   | 25 | 8  | 33 | 128.華昌  | 13 | 7  | 20 |
| 85.詠云   | 22 | 10 | 32 | 129.申利  | 15 | 5  | 20 |
| 86.民友   | 24 | 8  | 32 | 130.協和  | 13 | 7  | 20 |
| 87.亞州   | 25 | 7  | 32 | 131.新新  | 8  | 12 | 20 |
| 88.元昌   | 25 | 7  | 32 | 132.大達  | 15 | 5  | 20 |
| 89.鴻章   | 23 | 8  | 31 | 133.日新  | 16 | 4  | 20 |
| 90.交通   | 23 | 8  | 31 | 134.國粹  | 13 | 6  | 19 |
| 91.義泰   | 23 | 8  | 31 | 135.華成  | 12 | 7  | 19 |
| 92.文寶   | 14 | 17 | 31 | 136.祥豐  | 13 | 6  | 19 |
| 93.元益   | 21 | 9  | 30 | 137.協昇  | 8  | 11 | 19 |
| 94.大上海  | 22 | 8  | 30 | 138.新中華 | 12 | 7  | 19 |
| 95.觀魚   | 23 | 7  | 30 | 139.明華  | 12 | 7  | 19 |
| 96.天寶   | 16 | 14 | 30 | 140.同和  | 12 | 6  | 18 |
| 97.天南   | 22 | 8  | 30 | 141.美琳  | 13 | 5  | 18 |
| 98.鑄記   | 21 | 8  | 29 | 142.美利  | 8  | 10 | 18 |
| 99.南洋   | 21 | 8  | 29 | 143.美衛  | 10 | 8  | 18 |
| 100.均益  | 15 | 14 | 29 | 144.永康  | 12 | 6  | 18 |
| 101.四達  | 16 | 12 | 28 | 145.太康  | 13 | 5  | 18 |
| 102.陳祥興 | 20 | 7  | 27 | 146.永明  | 13 | 4  | 17 |
| 103.申江  | 18 | 8  | 26 | 147.中原  | 14 | 3  | 17 |
| 104.義昌  | 18 | 8  | 26 | 148.同裕  | 12 | 5  | 17 |
| 105.振元  | 18 | 8  | 26 | 149.柳蔭  | 11 | 6  | 17 |
| 106.亞洲  | 15 | 10 | 25 | 150.永大  | 12 | 5  | 17 |
| 107.同興  | 18 | 7  | 25 | 151.振大  | 11 | 6  | 17 |
| 108.美星  | 11 | 14 | 25 | 152.仁記  | 9  | 7  | 16 |
| 109.合羣  | 18 | 7  | 25 | 153.錦華  | 10 | 6  | 16 |
| 110.中國  | 20 | 4  | 24 | 154.興發  | 13 | 3  | 16 |
| 111.東方  | 15 | 9  | 24 | 155.文成  | 11 | 5  | 16 |
| 112.國泰  | 17 | 7  | 24 | 156.順泰  | 11 | 5  | 16 |
| 113.新康  | 17 | 7  | 24 | 157.南洋  | 11 | 4  | 15 |
| 114.元康  | 15 | 9  | 24 | 158.光明  | 10 | 5  | 15 |
| 115.東方  | 17 | 7  | 24 | 159.望平  | 10 | 5  | 15 |
| 116.昌文  | 17 | 7  | 24 | 160.成業  | 9  | 5  | 14 |
| 117.劉德記 | 17 | 7  | 24 | 161.泰記  | 11 | 3  | 14 |
| 118.廣興  | 17 | 7  | 24 | 162.中央  | 7  | 6  | 13 |
| 119.益興  | 16 | 7  | 23 | 163.新羣  | 7  | 6  | 13 |
| 120.申利  | 13 | 9  | 22 | 164.天生  | 8  | 5  | 13 |
| 121.儀成  | 10 | 12 | 22 | 165.麗文  | 9  | 4  | 13 |
| 122.大華  | 16 | 6  | 22 | 166.中南  | 7  | 5  | 12 |

|       |   |   |   |    |       |   |       |     |       |        |
|-------|---|---|---|----|-------|---|-------|-----|-------|--------|
| 167.新 | 民 | 8 | 4 | 12 | 195.興 | 達 | 6     |     | 3     | 9      |
| 168.通 | 民 | 8 | 4 | 12 | 196.南 | 洪 | 5     |     | 3     | 8      |
| 169.新 | 羣 | 7 | 5 | 12 | 197.威 | 利 | 5     |     | 3     | 8      |
| 170.順 | 泰 | 7 | 4 | 11 | 198.通 | 業 | 6     |     | 2     | 8      |
| 171.怡 | 安 | 6 | 6 | 11 | 189.藤 | 井 | 6     |     | 2     | 8      |
| 172.民 | 益 | 6 | 5 | 11 | 200.華 | 成 | 5     |     | 3     | 8      |
| 173.中 | 國 | 5 | 6 | 11 | 231.文 | 華 | 4     |     | 4     | 8      |
| 174.利 | 國 | 7 | 4 | 11 | 202.周 | 泉 | 5     |     | 3     | 8      |
| 175.昇 | 興 | 7 | 4 | 11 | 203.永 | 泰 | 4     |     | 3     | 7      |
| 176.維 | 新 | 7 | 4 | 11 | 204.德 | 昌 | 5     |     | 2     | 7      |
| 177.麗 | 華 | 3 | 8 | 11 | 205.曹 | 益 | 4     |     | 3     | 7      |
| 178.民 | 主 | 8 | 3 | 11 | 206.吳 | 永 | 5     |     | 2     | 7      |
| 179.文 | 化 | 7 | 4 | 11 | 907.大 | 昌 | 5     |     | 2     | 7      |
| 180.美 | 興 | 8 | 3 | 11 | 208.民 | 衆 | 5     |     | 2     | 7      |
| 181.勒 | 昌 | 6 | 4 | 10 | 209.榮 | 華 | 5     |     | 2     | 7      |
| 182.合 | 興 | 6 | 4 | 10 | 210.大 | 成 | 4     |     | 3     | 7      |
| 183.利 | 明 | 6 | 4 | 10 | 211.文 | 通 | 4     |     | 3     | 7      |
| 184.裕 | 康 | 5 | 5 | 10 | 212.通 | 業 | 4     |     | 2     | 6      |
| 185.洪 | 興 | 6 | 4 | 10 | 213.中 | 南 | 4     |     | 2     | 6      |
| 186.亞 | 州 | 6 | 4 | 10 | 214.興 | 業 | 4     |     | 2     | 6      |
| 187.永 | 義 | 6 | 4 | 10 | 215.元 | 茂 | 4     |     | 2     | 6      |
| 188.通 | 商 | 5 | 4 | 9  | 216.明 | 益 | 4     |     | 2     | 6      |
| 189.竟 | 成 | 5 | 4 | 9  | 217.利 | 明 | 3     |     | 2     | 5      |
| 190.中 | 央 | 6 | 3 | 9  | 218.東 | 南 | 3     |     | 2     | 5      |
| 191.派 | 利 | 5 | 4 | 9  | 219.恆 | 興 | 3     |     | 2     | 5      |
| 192.中 | 興 | 5 | 4 | 9  |       |   |       |     |       |        |
| 193.勤 | 業 | 4 | 5 | 9  | 總     | 計 | 7,455 | 480 | 2,452 | 10,337 |
| 194.利 | 泰 | 6 | 3 | 9  |       |   |       |     |       |        |

## 說明

材料來源：

十八年八月本局派調查員按廠址調查。

實得廠數：

219 家

實得工人數：

10,337 人

估計廠數：

200 家

估計工人數：

3,000 人

估計方法：

本市印刷廠號，隨在而有，規模大者，調查尚易，規模過小者，勢難挨門逐戶，一一清查，根據本局調查，實得廠數 219 家，實得工人數 10,337 人。據五彩石印同業公會墨色製板公會石印膠紙公會華洋印刷工會及墨色石印機器工會估計，大約尚有 200 家左右，每家工人平均作 15 人（男工 10 人，女工 1 人，童工 4 人）計算，可得 3,000 人（男工 2,000 人，女工 200 人，童工 800 人）連同實得數計算，本市印刷工廠共有 419 家，工人 13,337 人，內男工 9,455 人女工 630 人，童工 3,252 人。

讀者讀了上面那許多表格之後，對於各業各廠的人數分配情形，一定覺得過分詳盡，或者反不容易得到一個具體的印象。因此我們又編製一種上海特別市各業工廠按照人數分組表。

**各業工廠按照人數分組表之編製目的和分析** 在分組表內第一件事值得注意的，是各組的廠數。據調查所得二十一業的廠數應當有 2,326 家，但如除去估計的廠數 733 家和棉紡業內所缺少的 9 家（棉紡業內有兩家沒有人數，七家係因分廠，人數不詳。我們統計的時候，對於那些只有一個總人數的廠家即當做一個廠家看待），尚剩 1,584 家，所以分組表中的廠數便不到 2,326 家了。

假使從分組表中所載的 1,584 廠數內，把不滿三十人的廠家除去，則三十人以上廠家尚有 697 家（ $1584 - 887 = 697$ ）。因為翻砂機器印刷等業，廠數最多，而大多數廠家的人數卻很少，可是我們所要得到的，是一業總人數，所以不拘廠家人數的多少，都應一一調查才能夠得到各該業的總人數。

現在把分組表內分組的情形說一說。本市各業工廠工人數在十人以內者為最多，計 414 廠，十人至十九人者計 307 廠，二十人至二十九人者計 166 廠，三十人至三十九人者計 96 廠，四十人至四十九人者 97 廠，這樣的推算下去，一直到九十人至九十九人一組之後，組距由十改做五十，即以一〇〇人至一四九人的一組為最多，計 69 廠，更推算下去一直到四五〇人至四九九人的一組之後，組距又由五十改做一百，以五〇〇人至五九九人的一組為最多，計 13 廠。

如果把前列二十一表打開一看，便知道本市工廠工人在一千人以上者固然不少，而在四五千以上者，則也不多。人數分組表內雖然統計了人數一千以上的有 46 廠，但是外籍工廠像英美烟草公司工廠工人總數固有 8,876 人，而廠數並不止一個，又如英商怡和、公益、楊樹浦三紗廠的工人總數有 11,100 人，而各個廠的人數並未分開，又如日華第一二及第三廠的工人數，也無從分開調查。

現在把各業工廠按照人數分組表刊在後面：

第二十二表 上海特別市各業工廠按照人數分組表

| 人 數 分 組 | 廠 數 | 人 數 分 組   | 廠 數      |
|---------|-----|-----------|----------|
| 10 以下   | 414 | 250-299   | 30       |
| 10-19   | 307 | 300-349   | 51       |
| 20-29   | 166 | 350-399   | 33       |
| 30-39   | 96  | 400-449   | 9        |
| 40-49   | 97  | 450-499   | 7        |
| 50-59   | 47  | 500-599   | 13       |
| 60-69   | 35  | 600-699   | 9        |
| 70-79   | 21  | 700-799   | 6        |
| 80-89   | 26  | 800-899   | 2        |
| 90-99   | 18  | 900-999   | 8        |
| 100-149 | 69  | 1,000 及以上 | 46       |
| 150-199 | 47  |           |          |
| 200-249 | 27  | 總 計       | 1,584 註一 |

註一 本表所載各組廠數，僅以十八年八月調查的實得廠數為限，估計廠數不在內。又有少數廠家，分廠遍立，但所報人數，只係各分廠合併的總數，為便利統計起見，也只好認為一個單位。

**上海各業工廠工人分配表之分析** 在調查工資之先，必應有一個全市各業工人數的調查，然後各業的內容和結構可以明瞭，並且可以知道那幾業是比較重要的工業，那幾業是次要的，可以暫緩調查，將來一業工人工資材料，要搜集到何種標準，才可以代表該業的情形。假使事前沒有費過這樣的一番工作，則將來調查的結果，勢必徒勞而無功。十八年的工資率調查，是在九月開始十月結束，十八年的工人數調查，是在八月內調查齊備。下面的上海各業工廠及工人分配表，計分兩部，前部是記載十八年八月調查的結果，合估計數和實得數而得，後部是記載調查廠數和工人數。兩部對照之後，可以知道這次工資率調查的人數有的已經達到或遠過各該業總人數三分之一以上，有的似尚不足。現在把那些不足三分之一的原因說一說。

工資率調查實得的人數不足估計的人數三分之一的，有玻璃、針織、製蛋、烟草和印刷等業。年來玻璃業營業不甚發達，同業之中競爭亦復激烈，以致工廠時有倒閉，工人數迭減。在十八年八月調查的時候，情形已不甚好，到了舉行工資率調查的時候，廠家選擇，尤感困難。針織業因廠址散漫，小廠也多，努力調查，人數依舊不足。本市製蛋業僅七廠，國人經營者三廠，調查上尚無困難，外人經營者僅抄到一家（海寧蛋

廠)，所以人數略有不足。烟草業因英美花旗等外廠，未曾供給材料，少了一萬多人。規模較小的廠家的工帳，也頗不易抄到，又缺了不少的人。所以結果不及估計人數之三分之一。印刷業規模狹小的廠家最多，一一調查，固然是不可能，工帳記載也不甚清楚的，所以只好選擇幾個規模較大的廠家調查一下。還有那些外國廠家，從來不曾供給我們絲毫材料，這也是人數調查得較少的原因。至於調查人數，超過三分之一的有鋸木、製皂、火柴、搪瓷、繅絲、絲織、棉織、漂染、麵粉、榨油、造紙等業，當然更可以代表各該業的情形了。

總計此次工資率調查，計 21 業，274 廠，97,042 人，內男工 31,053 人，占總人數百分之 32，女工 58,473 人，占總人數百分之 60.3，童工 7,516 人，占總人數百分之 7.7。若照計時計件分配，則時工有 56,629 人（內男工 27,297 人，女工 22,676 人，童工 6,656 人）占總人數百分之 58.4，件工有 40,413 人，（內男工 3,756 人，女工 35,797 人，童工 860 人）占總人數百分之 41.6。所以就整個的統計工作說，則此次工資率調查的結果，很可代表各該業的情形，因為查到的 97,042 人已達到二十一業的總人數 285,700 人的三分之一了。

第二十三表 上海特別市各業工廠及工人分配表

| 工業分類          | 廠數    | 工人總數   |         |        |         | 工資率調查所得的廠數和工人數 |        |       |        |        |        |        |       |     | 總計    |     |        |
|---------------|-------|--------|---------|--------|---------|----------------|--------|-------|--------|--------|--------|--------|-------|-----|-------|-----|--------|
|               |       | 男      | 女       | 童      | 總計      | 廠數             | 男      |       |        | 女      |        |        | 童     |     |       |     |        |
|               |       |        |         |        |         |                | 計時     | 計件    | 合計     | 計時     | 計件     | 合計     | 計時    | 計件  |       | 合計  |        |
| I. 木材製造目      |       |        |         |        |         |                |        |       |        |        |        |        |       |     |       |     |        |
| 鋸木業           | 23    | 1,886  | —       | —      | 1,886   | 7              | 1,183  | —     | 1,183  | —      | —      | —      | —     | —   | —     | —   | 1,183  |
| II. 冶煉工業目     |       |        |         |        |         |                |        |       |        |        |        |        |       |     |       |     |        |
| 翻砂業           | 120   | 1,133  | —       | 516    | 1,649   | 24             | 540    | —     | 540    | —      | —      | —      | —     | —   | —     | —   | 540    |
| III. 機器及金屬製品目 |       |        |         |        |         |                |        |       |        |        |        |        |       |     |       |     |        |
| 機器業           | 518   | 6,455  | —       | 3,300  | 9,755   | 31             | 2,894  | 64    | 2,958  | —      | —      | —      | —     | —   | —     | —   | 2,958  |
| IV. 交通用具目     |       |        |         |        |         |                |        |       |        |        |        |        |       |     |       |     |        |
| 造船業           | 13    | 5,994  | —       | 254    | 6,248   | 3              | 2,040  | —     | 2,040  | —      | —      | —      | —     | —   | —     | —   | 2,040  |
| V. 土石製造目      |       |        |         |        |         |                |        |       |        |        |        |        |       |     |       |     |        |
| 玻璃業           | 39    | 1,588  | —       | 1,455  | 3,043   | 8              | 466    | —     | 466    | —      | —      | —      | 449   | —   | —     | 449 | 915    |
| VI. 化學工業目     |       |        |         |        |         |                |        |       |        |        |        |        |       |     |       |     |        |
| 製皂業           | 36    | 800    | 805     | —      | 1,105   | 9              | 563    | —     | 563    | 241    | —      | 241    | —     | —   | —     | —   | 809    |
| 火柴業           | 7     | 911    | 1,232   | 553    | 2,696   | 4              | 253    | 306   | 559    | —      | 818    | 818    | 24    | 318 | 342   | —   | 1,719  |
| 搪瓷業           | 16    | 1,857  | 353     | 90     | 2,300   | 6              | 994    | 13    | 1,007  | 168    | 18     | 186    | 59    | —   | 59    | —   | 1,252  |
| VII. 紡織工業目    |       |        |         |        |         |                |        |       |        |        |        |        |       |     |       |     |        |
| 絲業            | 107   | 1,712  | 37,211  | 12,453 | 51,376  | 43             | 518    | —     | 518    | 14,643 | —      | 14,643 | 4,873 | —   | 4,873 | —   | 20,034 |
| 棉紡業           | 61    | 23,064 | 84,270  | 3,548  | 110,882 | 19             | 7,205  | 353   | 7,558  | 4,636  | 22,878 | 27,574 | 918   | 177 | 1,161 | —   | 36,293 |
| 絲織業           | 68    | 2,563  | 1,229   | —      | 3,792   | 12             | 385    | 617   | 1,002  | 292    | 274    | 566    | —     | —   | —     | —   | 1,568  |
| 棉織業           | 45    | 6,547  | 22,334  | 303    | 29,244  | 21             | 1,706  | 852   | 2,558  | 721    | 3,407  | 7,128  | 60    | 334 | 394   | —   | 10,080 |
| 針織業           | 177   | 2,636  | 7,236   | 203    | 10,125  | 15             | 298    | 274   | 572    | 230    | 1,364  | 1,594  | —     | —   | —     | —   | 2,166  |
| 漂染業           | 48    | 2,914  | —       | —      | 2,914   | 18             | 1,443  | —     | 1,443  | —      | —      | —      | —     | —   | —     | —   | 1,443  |
| XIII. 製革品目    |       |        |         |        |         |                |        |       |        |        |        |        |       |     |       |     |        |
| 製革業           | 150   | 1,552  | 2       | 296    | 1,850   | 12             | 592    | —     | 592    | —      | —      | —      | —     | —   | —     | —   | 592    |
| IX. 飲食品目      |       |        |         |        |         |                |        |       |        |        |        |        |       |     |       |     |        |
| 麵粉業           | 13    | 2,112  | —       | —      | 2,112   | 10             | 1,521  | —     | 1,521  | —      | —      | —      | —     | —   | —     | —   | 1,521  |
| 榨油業           | 11    | 1,951  | —       | —      | 1,951   | 10             | 923    | 498   | 1,421  | —      | —      | —      | —     | —   | —     | —   | 1,421  |
| 製蛋業           | 7     | 1,299  | 2,186   | —      | 3,585   | 3              | 341    | —     | 341    | 74     | —      | 764    | —     | —   | —     | —   | 1,105  |
| 烟草業           | 90    | 7,335  | 15,703  | 1,259  | 24,297  | 7              | 1,356  | —     | 1,356  | 566    | 3,835  | 4,401  | 113   | —   | 113   | —   | 5,870  |
| X. 造紙印刷目      |       |        |         |        |         |                |        |       |        |        |        |        |       |     |       |     |        |
| 造紙業           | 7     | 872    | 681     | —      | 1,553   | 5              | 792    | —     | 792    | 270    | —      | 270    | —     | —   | —     | —   | 1,062  |
| 印刷業           | 419   | 9,455  | 630     | 3,252  | 13,337  | 7              | 1,279  | 779   | 2,058  | 85     | 203    | 288    | 94    | 31  | 125   | —   | 2,471  |
| 總計            | 2,326 | 84,786 | 173,432 | 27,482 | 285,700 | 274            | 27,297 | 3,756 | 31,053 | 22,676 | 35,797 | 58,473 | 6,656 | 869 | 7,516 | —   | 97,042 |



## 第二章 各業平均工資率及工作時數

**三種表格的目的** 我們將工資率及工作時間統計的結果分裂三種表格：第一種叫做上海特別市各業各部各職平均工資率及工作時數表，第二種叫做上海特別市各業平均工資率及工作時數簡表，第三種叫做上海特別市各業男工女工及童工平均工資簡表。第一種表格內容比較詳盡，但因表格過多為便利讀者醒目起見，所以特將各表中之業平均數抽出來分別男工女工及童工單獨又製了一個第二種簡表。至第三種各業男工女工及童工工資率簡表，是根據第二種表格編製而成的，從這一個表內讀者對於男工女工及童工的工資的個別情形，當可知其梗概。現在先將第一種表格各表的内容約略的分析一下，不過這裏所分析的，僅以十八年九月二十五日調查的結果為限，至於各業各職各工的工資率變動的情形，因為事實上只有一次的材料，分析的工作，當然無從着手了。

**各業各部各職平均工資率及工作時數表之分析** 第一種表格總計有二十一表，每一表格，至少可以使得讀者明瞭下列各種情形：

- 一、各業製造程序和職務分配，
- 二、時工和件工的人數分配和各職的人數分配，
- 三、各組的總人數和男工或女工或童工的總人數，
- 四、工資的常數分配(frequency distribution)，
- 五、各職男工或女工或童工的每小時平均工資率、每日平均工作時數和每日平均工資率，
- 六、各職時工或件工的每小時平均工資率、每日平均工作時數和每日平均工資率。

各業各部各職各工的工資，既有了每小時平均工資率，似乎可以不必再有每日的平均工資率。但是上海工人的工資和各國比較，却是很低，平均一小時最多的不過一角五分，最小的甚至只有一分或二分的，每小時的平均工資率，雖然是比較上準確的單位，但工資既小，讀者必難得到具體的印象，有了每日的平均工資率，便可以補救這

種缺憾。每日平均工資率，是以該業同職的每日平均工作時數乘每小時的平均工資率而得。這每日平均工作時數的實質在第一編第六章內已有討論，這裏不必贅述。

從第一種表格各表內，還有一件事實，可以附帶提出來研究，就是工資範數(mode)。範數和平均數的性質不同，平均數是一種通扯的數目，範數是各項中之最多一項，可用以代表最普通的情形。在各業各職的工資常數分配(frequency distribution)內，範數的地位，有時依照常態分配，有時捉摸不定，有時竟沒有範數。鋸木、翻砂、機器、造船等業的男工，玻璃業的男工和童工，製皂業的男工和女工，火柴業的男工女工及童工，搪瓷業的男工，繅絲業的男工女工及童工，棉紡業的男工女工及童工，絲織業的女工，棉織業的男工女工及童工，製革、麵粉、榨油等業的男工，製蛋業的男工及女工，烟草業的童工，造紙業的男工及女工，和印刷業的女工的工資常數分配頗為整齊，範數的地位，一望而知，但搪瓷業的女工絲織業的男工和烟草業的女工的工資，往往不只一個範數，搪瓷業的童工和印刷業的童工的工資常數分配比較散漫，其間並無範數存在。至於針織業的男工和女工烟草業的男工和印刷業的男工的各職的常數分配，雖不甚整齊，但一業的常數分配現象，還不十分散漫，範數也尚可以發現。計件工人的工作時間，固然不甚固定，出件數又復不能一致，所以工資率的常數分配，大概以各職的計件工人為最不整齊。又童工人數，比較不多，工資的常數分配，又極散漫，所以工資的集中現象，不能構成。此外尚有一個特殊的現象，就是榨油業的計件工人的工資，完全在\$0.085-0.0949一組內，其他各組，則一個人沒有。這是因為廠內對於此等工人的工資，就是這樣固定的規定的原故。

各職各工的工作時間數，雖偶少例外，大率在八小時至十二小時之間，組數(number of classes)不多，第一種表格內，僅列各職每日平均工作時數，似無詳列分組情形之必要。下面都是各業各部各職平均工資率及工作時數表：

第二十四表 I. 木材製造業：鋸木業各職平均工資率及工作時數表  
男 工

| 職 務 | 調查人數     | 依 照 工 資 分 組 之 各 職 人 數 |                |                |                |                |                |                |                |                |                |                |                |                |                | 每小時<br>平均工<br>資率 | 每日<br>平均工<br>作時數 | 每日平<br>均工資 |                |
|-----|----------|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|------------------|------------|----------------|
|     |          | —<br>\$ .0349         | .035—<br>.0449 | .045—<br>.0549 | .055—<br>.0649 | .065—<br>.0749 | .075—<br>.0849 | .085—<br>.0949 | .095—<br>.1049 | .105—<br>.1149 | .115—<br>.1249 | .125—<br>.1349 | .135—<br>.1449 | .145—<br>.1549 | .155—<br>.1649 |                  |                  |            | .165—<br>.1749 |
| 木 工 | 時工 1,035 | 13                    | 9              | 116            | 572            | 156            | 85             | 35             | 16             | 8              | 5              | 9              | 2              | 3              | 4              | 2                | \$ 0.065         | 9          | \$ 0.585       |
| 司 機 | ,, 109   |                       |                | 1              | 1              | 9              | 11             | 15             | 6              | 15             | 16             | 6              | 11             | 4              | 4              | 10               | 0.114            | 9          | 1.026          |
| 雜 務 | ,, 39    | 3                     |                | 7              | 15             | 9              | 1              |                | 2              | 2              |                |                |                |                |                |                  | 0.068            | 9          | 0.567          |
| 總 計 | 1,183    | 13                    | 9              | 124            | 588            | 174            | 97             | 50             | 24             | 25             | 21             | 15             | 13             | 7              | 8              | 12               | \$ 0.069         | 9          | \$ 0.621       |

第二十五表 II. 冶鍊工業目：翻砂業各職平均工資率及工作時數表  
男 工

| 職務     | 調查人數 | 依 照 工 資 分 組 之 各 職 人 數 |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                | 每小時<br>平均工<br>資率 | 每日<br>平均工<br>作時數 | 每日平<br>均工資 |            |       |       |
|--------|------|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|------------------|------------|------------|-------|-------|
|        |      | .005-<br>.0149        | .015-<br>.0249 | .025-<br>.0349 | .035-<br>.0449 | .045-<br>.0549 | .055-<br>.0649 | .065-<br>.0749 | .075-<br>.0849 | .085-<br>.0949 | .095-<br>.1049 | .105-<br>.1149 | .115-<br>.1249 | .125-<br>.1349 | .135-<br>.1449 | .145-<br>.1549 | .155-<br>.1649 | .165-<br>.1749 | .175-<br>.1849 | .185-<br>.1949 |                  |                  |            | .195-<br>— |       |       |
| 木 模 時工 | 3    |                       |                |                |                |                |                |                | 1              |                |                |                |                | 1              |                |                |                |                |                |                | \$               | 0.107            | 9          | \$         | 0.963 |       |
| 翻 砂 ,, | 432  | 1                     | 2              | 7              | 21             | 25             | 36             | 46             | 32             | 86             | 48             | 34             | 36             | 18             | 19             | 9              | 1              | 3              | 4              | 3              | 1                | 0.091            | 9          | 0.819      |       |       |
| 爐 灶 ,, | 14   |                       |                |                | 1              |                |                | 2              |                | 2              | 1              | 4              |                | 1              | 3              |                |                |                |                |                |                  | 0.104            | 9          | 0.936      |       |       |
| 雜 務 ,, | 91   |                       | 1              | 15             | 13             | 16             | 11             | 20             | 7              | 3              | 5              |                |                |                |                |                |                |                |                |                |                  | 0.057            | 9          | 0.513      |       |       |
| 總 計    | 540  | 1                     | 3              | 22             | 35             | 41             | 47             | 68             | 40             | 91             | 54             | 39             | 36             | 20             | 22             | 9              | 1              | 3              | 4              | 3              | 1                | \$               | 0.086      | 9          | \$    | 0.774 |

第二十六表 III. 機器及金屬製品目：機器業各職平均工資率及工作時數表  
男 工

| 職務     | 調查人數  | 依 照 工 資 分 組 之 各 職 人 數 |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                | 每小時<br>平均工<br>資率 | 每日<br>平均工<br>作時數 | 每日平<br>均工資 |            |    |       |
|--------|-------|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|------------------|------------|------------|----|-------|
|        |       | .005-<br>.0149        | .015-<br>.0249 | .025-<br>.0349 | .035-<br>.0449 | .045-<br>.0549 | .055-<br>.0649 | .065-<br>.0749 | .075-<br>.0849 | .085-<br>.0949 | .095-<br>.1049 | .105-<br>.1149 | .115-<br>.1249 | .125-<br>.1349 | .135-<br>.1449 | .145-<br>.1549 | .155-<br>.1649 | .165-<br>.1749 | .175-<br>.1849 | .185-<br>.1949 |                  |                  |            | .195-<br>— |    |       |
| 鉗 工 時工 | 1,204 | 5                     |                | 10             | 52             | 57             | 129            | 105            | 140            | 213            | 143            | 131            | 86             | 63             | 22             | 11             | 13             | 8              | 4              | 5              | 7                | \$               | 0.091      | 9          | \$ | 0.819 |
| 件 工    | 64    |                       |                |                |                | 2              | 7              | 6              | 1              | 22             | 5              | 16             | 2              | 3              |                |                |                |                |                |                |                  | 0.092            | 9          | 0.828      |    |       |
| 車 工 時工 | 912   |                       | 2              | 3              | 16             | 37             | 66             | 88             | 116            | 164            | 127            | 128            | 64             | 45             | 17             | 10             | 6              | 1              | 12             | 4              | 6                | 0.089            | 9          | 0.801      |    |       |
| 工 匠 ,, | 558   |                       |                | 1              | 13             | 25             | 56             | 100            | 86             | 88             | 44             | 53             | 49             | 24             | 11             | 1              | 1              | 3              |                | 1              | 2                | 0.088            | 9          | 0.792      |    |       |
| 雜 務 ,, | 220   |                       |                | 12             | 57             | 10             | 95             | 22             | 11             | 7              |                | 3              | 2              |                |                |                |                |                | 1              |                |                  | 0.057            | 9          | 0.513      |    |       |
| 總 計    | 2,958 | 5                     | 2              | 26             | 138            | 181            | 353            | 321            | 354            | 494            | 319            | 331            | 203            | 135            | 50             | 22             | 20             | 12             | 17             | 10             | 15               | \$               | 0.087      | 9          | \$ | 0.783 |

第二十七表 IV. 交通用具目：造船業各職平均工資率及工作時數表

男 工

工 資 和 工 作 時 間

| 職務       | 調查人數  | 依 照 工 資 分 組 之 各 職 人 數 |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                | 每小時<br>平均工<br>資率 | 每日<br>平均工<br>作時數 | 每日平<br>均工資 |            |
|----------|-------|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|------------------|------------|------------|
|          |       | \$ —<br>.0349         | .035—<br>.0449 | .045—<br>.0549 | .055—<br>.0649 | .065—<br>.0749 | .075—<br>.0849 | .085—<br>.0949 | .095—<br>.1049 | .106—<br>.1149 | .115—<br>.1249 | .125—<br>.1349 | .135—<br>.1449 | .145—<br>.1549 | .155—<br>.1649 | .165—<br>.1749 | .175—<br>.1849 | .185—<br>.1949 | .195—<br>.2049 | .205—<br>.2149 |                  |                  |            | .215—<br>— |
| 木 模 時工   | 96    |                       |                |                | 6              | 12             | 4              | 1              | 2              | 5              | 3              | 5              | 13             | 8              | 12             | 10             | 4              | 5              |                | 2              | 4                | \$ 0.135         | 9          | \$ 1.215   |
| 翻 砂 ,,   | 205   |                       | 15             | 4              | 44             | 29             | 11             | 16             | 6              | 14             | 17             | 11             | 7              | 7              | 6              | 7              | 6              | 1              |                |                | 4                | 0.095            | 9          | 0.855      |
| 打 鐵 ,,   | 167   |                       |                |                | 1              | 12             | 22             | 59             | 19             | 20             | 12             | 16             | 3              | 2              | 3              | 3              | 1              | 2              |                |                | 1                | 0.103            | 9          | 0.927      |
| 打 銅 ,,   | 227   |                       | 1              | 2              | 8              | 3              | 6              | 5              | 3              | 19             | 21             | 35             | 47             | 29             | 26             | 8              | 9              | 2              | 3              | 2              | 7                | 0.186            | 9          | 1.224      |
| 車 工 ,,   | 219   |                       | 2              | 22             | 15             | 19             | 10             | 8              | 3              | 17             | 22             | 22             | 27             | 11             | 17             | 19             | 4              | 1              | 2              | 1              | 6                | 0.115            | 9          | 1.035      |
| 鉗 工 ,,   | 686   | 1                     | 1              |                | 2              | 5              | 22             | 28             | 26             | 92             | 113            | 101            | 89             | 48             | 58             | 31             | 18             | 12             | 7              | 10             | 22               | 0.135            | 9          | 1.215      |
| 電 燈 匠 ,, | 119   | 1                     | 9              | 1              | 13             | 4              | 6              | 10             | 11             | 24             | 13             | 6              | 9              |                | 2              | 2              | 2              |                | 1              | 1              | 4                | 0.105            | 9          | 0.945      |
| 機 務 ,,   | 143   |                       |                |                |                | 19             | 36             | 43             | 20             | 15             | 4              | 4              | 2              |                |                |                |                |                |                |                |                  | 0.091            | 9          | 0.819      |
| 雜 務 ,,   | 92    | 15                    | 24             | 4              | 35             | 14             |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                  | 0.051            | 9          | 0.459      |
| 傳 習 生 ,, | 86    | 86                    |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                  | 0.030            | 9          | 0.270      |
| 總 計      | 2,040 | 103                   | 52             | 33             | 124            | 117            | 117            | 161            | 90             | 216            | 235            | 200            | 197            | 96             | 121            | 71             | 44             | 23             | 15             | 16             | 48               | \$ 0.113         | 9          | \$ 1.017   |

第二十八表 V. 土石製造目：玻璃業各職平均工資率及工作時數表

男 工

| 職務   | 調查人數 | 依 照 工 資 分 組 之 各 職 人 數 |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            | 每小時平均工資率 | 每日平均工作時數 | 每日平均工資   |            |          |
|------|------|-----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------|----------|----------|------------|----------|
|      |      | \$ — .0349            | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 | .145-.1549 | .155-.1649 | .165-.1749 | .175-.1849 | .185-.1949 | .195-.2049 |          |          |          | .205-.2149 | .215 —   |
| 吹磨時工 | 337  |                       | 34         | 58         | 42         | 30         | 30         | 12         | 18         | 10         | 13         | 14         | 8          | 14         | 14         | 5          | 1          | 1          | 4          | 1        | 9        | \$ 0.093 | 8          | \$ 0.744 |
| 雜務   | 129  |                       | 26         | 40         | 25         | 19         | 4          | 5          | 2          | 6          |            | 2          |            |            |            |            |            |            |            |          |          | 0.060    | 8          | 0.480    |
| 總計   | 466  |                       | 60         | 98         | 67         | 49         | 34         | 17         | 20         | 16         | 13         | 26         | 8          | 14         | 14         | 5          | 10         | 1          | 4          | 1        | 9        | \$ 0.084 | 8          | \$ 0.672 |

童 工

| 職 務  | 調查人數 | 依 照 工 資 分 組 之 各 職 人 數 |            |            |            |            |            |            |            |            |            |            |            |            |            | 每小時平均工資率 | 每日平均工作時數 | 每日平均工資 |        |  |  |          |   |          |
|------|------|-----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------|----------|--------|--------|--|--|----------|---|----------|
|      |      | \$ .075-.0149         | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1159 | .115-.1249 | .125-.1349 | .135-.1449 |          |          |        | .145 — |  |  |          |   |          |
| 圈夾時工 | 296  |                       |            | 67         | 177        | 31         | 16         | 5          |            |            |            |            |            |            |            |          |          |        |        |  |  | \$ 0.040 | 8 | \$ 0.320 |
| 烘冷   | 109  |                       |            | 8          | 75         | 7          | 19         |            |            |            |            |            |            |            |            |          |          |        |        |  |  | 0.043    | 8 | 0.344    |
| 雜務   | 44   |                       |            | 36         | 8          |            |            |            |            |            |            |            |            |            |            |          |          |        |        |  |  | 0.032    | 8 | 0.256    |
| 總計   | 449  |                       |            | 111        | 260        | 38         | 35         | 5          |            |            |            |            |            |            |            |          |          |        |        |  |  | \$ 0.040 | 8 | \$ 0.320 |

第二十九表 VI. 化學工業目：製皂業各部各職平均工資率及工作時數表

## 男 工

| 部名及職務    | 調查人數 | 依 照 工 資 分 組 之 各 職 人 數 |                |                |                |                |                |                |                |                |                |                |                |                |                | 每小時平<br>均工資率 | 每日平均<br>工作時數 | 每日平均<br>工資率 |
|----------|------|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------|--------------|-------------|
|          |      | \$<br>.005-<br>.0149  | .015-<br>.0249 | .025-<br>.0349 | .035-<br>.0449 | .045-<br>.0549 | .055-<br>.0649 | .065-<br>.0749 | .075-<br>.0849 | .085-<br>.0949 | .095-<br>.1049 | .105-<br>.1149 | .115-<br>.1249 | .125-<br>.1349 | .135-<br>.1449 |              |              |             |
| 製造部      |      |                       |                |                |                |                |                |                |                |                |                |                |                |                |                | \$           |              | \$          |
| 溶 油 時工   | 42   |                       |                |                | 3              | 39             |                |                |                |                |                |                |                |                |                | 0.049        | 9 ½          | 0.451       |
| 製 皂 ,,   | 299  |                       |                | 6              | 22             | 206            | 34             | 18             | 6              | 3              | 1              |                | 2              | 1              |                | 0.053        | 9 ½          | 0.488       |
| 提 甘 油 ,, | 29   |                       |                |                |                | 1              | 27             | 1              |                |                |                |                |                |                |                | 0.060        | 9            | 0.540       |
| 打 印 ,,   | 25   |                       |                |                | 1              | 2              | 20             | 2              |                |                |                |                |                |                |                | 0.059        | 9            | 0.521       |
| 裝 璜 部 ,, | 26   |                       |                |                | 4              | 17             | 3              | 2              |                |                |                |                |                |                |                | 0.051        | 9 ½          | 0.464       |
| 包 裝 ,,   | 3    |                       |                |                | 2              | 1              |                |                |                |                |                |                |                |                |                | 0.043        | 9            | 0.387       |
| 機 務 部    |      |                       |                |                |                |                |                |                |                |                |                |                |                |                |                |              |              |             |
| 司 機 ,,   | 79   |                       |                |                | 1              | 1              |                | 16             |                |                | 60             | 1              |                |                |                | 0.093        | 9            | 0.837       |
| 修 理 ,,   | 22   |                       |                |                |                |                | 10             | 4              | 3              | 5              |                |                |                |                |                | 0.071        | 9            | 0.639       |
| 雜 務 ,,   | 43   |                       |                |                | 11             | 26             | 6              |                |                |                |                |                |                |                |                | 0.049        | 9 ¾          | 0.461       |
| 總 計      | 568  |                       |                | 6              | 44             | 293            | 100            | 43             | 9              | 8              | 61             | 1              | 2              | 1              |                | 0.059        | 9 ½          | 0.543       |

女 工

| 部名及職務 | 調查人數   | 依 照 工 資 分 組 之 各 職 人 數 |       |       |       |       |       |       |       |       |       |       |       |       |       | 每小時平均<br>均工資率 | 每日平均<br>工作時數 | 每日平均<br>工資率 |       |    |       |
|-------|--------|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|--------------|-------------|-------|----|-------|
|       |        | \$ .005-              | .015- | .025- | .035- | .045- | .055- | .065- | .075- | .085- | .095- | .105- | .115- | .125- | .135- |               |              |             | .145- |    |       |
|       |        | .0149                 | .0249 | .0349 | .0449 | .0549 | .0649 | .0749 | .0849 | .0949 | .1049 | .1149 | .1249 | .1349 | .1449 | —             |              |             |       |    |       |
| 製造部   |        |                       |       |       |       |       |       |       |       |       |       |       |       |       |       |               | \$           |             | \$    |    |       |
| 製 皂   | 時工 3   |                       |       | 2     | 1     |       |       |       |       |       |       |       |       |       |       |               | 0.033        | 9           | 0.297 |    |       |
| 打 印   | ,, 12  |                       |       |       | 12    |       |       |       |       |       |       |       |       |       |       |               | 0.040        | 9           | 0.360 |    |       |
| 裝璜部   |        |                       |       |       |       |       |       |       |       |       |       |       |       |       |       |               |              |             |       |    |       |
| 包 裝   | ,, 197 |                       | 38    | 69    | 70    | 16    | 7     | 4     | 1     | 1     |       |       |       |       |       |               | 0.036        | 9½          | 0.331 |    |       |
| 製 匣   | ,, 19  |                       | 8     | 8     | 1     | 2     |       |       |       |       |       |       |       |       |       |               | 0.028        | 9           | 0.252 |    |       |
| 機務部   |        |                       |       |       |       |       |       |       |       |       |       |       |       |       |       |               |              |             |       |    |       |
| 雜 務   | ,, 10  |                       | 7     | 1     |       |       | 1     |       | 1     |       |       |       |       |       |       |               | 0.031        | 9           | 0.279 |    |       |
| 總 計   | 241    |                       | 58    | 71    | 84    | 18    | 8     | 4     | 2     | 1     |       |       |       |       |       |               | \$           | 0.035       | 9½    | \$ | 0.322 |



第三十表 VI. 化學工業目：火柴業各職平均工資率及工作時數表

男 工

| 職 務        | 調查人數   | 依 照 工 資 分 組 之 各 職 人 數 |                |                |                |                |                |                |                |                |                |                |                |                |                | 每小時平<br>均工資率 | 每日平均<br>工作時數 | 每日平均<br>工資率 |           |
|------------|--------|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------|--------------|-------------|-----------|
|            |        | \$<br>.005-<br>.0149  | .015-<br>.0249 | .025-<br>.0349 | .035-<br>.0449 | .045-<br>.0549 | .055-<br>.0649 | .065-<br>.0749 | .075-<br>.0849 | .085-<br>.0949 | .095-<br>.1049 | .105-<br>.1149 | .115-<br>.1249 | .125-<br>.1349 | .135-<br>.1449 |              |              |             | .145<br>— |
| 齊 梗<br>排 板 | 時工 19  |                       |                | 8              | 2              |                | 9              |                |                |                |                |                |                |                |                |              | \$ 0.045     | 9%          | \$ 0.423  |
|            | ,, 18  |                       |                |                |                | 3              | 8              | 7              |                |                |                |                |                |                |                |              | 0.062        | 9 1/10      | 0.564     |
| 上 油        | 件工 154 |                       |                |                |                |                |                |                | 2              | 3              | 56             | 7              | 2              | 84             |                | 0.127        | 9%           | 1.194       |           |
|            | 時工 9   |                       |                |                | 2              | 6              |                | 1              |                |                |                |                |                |                |                | 0.060        | 9%           | 0.564       |           |
| 上 藥        | 件工 29  |                       |                |                |                | 8              | 7              |                | 3              |                | 2              | 1              | 2              | 4              | 2              | 0.093        | 9%           | 0.893       |           |
|            | 時工 58  |                       |                |                | 2              | 14             | 17             | 12             | 6              | 2              |                |                |                |                |                | 0.062        | 9%           | 0.588       |           |
| 烘 頭        | 件工 46  |                       |                |                |                |                | 1              | 10             | 21             | 1              | 4              | 3              |                |                | 6              | 0.099        | 9 3/10       | 0.921       |           |
|            | 時工 11  |                       |                |                | 6              | 3              | 1              | 1              |                |                |                |                |                |                |                | 0.057        | 9%           | 0.536       |           |
| 拆 板        | 件工 9   |                       |                |                |                |                |                |                | 3              | 4              | 1              | 1              |                |                |                | 0.100        | 5%           | 0.940       |           |
|            | 時工 34  |                       |                |                | 3              | 14             | 15             | 2              |                |                |                |                |                |                |                | 0.055        | 9 1/3        | 0.513       |           |
| 裝 盒        | 件工 56  |                       |                |                | 2              | 5              | 9              | 8              | 24             | 6              | 2              |                |                |                |                | 0.073        | 9%           | 0.686       |           |
|            | 時工 28  |                       |                | 4              | 1              | 1              | 9              | 11             | 2              |                |                |                |                |                |                | 0.060        | 9 3/10       | 0.558       |           |
| 刷 燐        | 件工 7   |                       |                |                |                |                |                |                | 7              |                |                |                |                |                |                | 0.090        | 9            | 0.810       |           |
|            | 時工 19  |                       |                |                |                | 2              | 11             | 6              |                |                |                |                |                |                |                | 0.062        | 9 1/4        | 0.574       |           |
| 包 封<br>雜 務 | 時工 12  |                       |                |                | 2              | 4              | 2              | 3              |                | 1              |                |                |                |                |                | 0.058        | 9 3/4        | 0.566       |           |
|            | ,, 50  |                       |                |                | 6              | 3              | 13             | 6              | 15             | 6              |                | 1              |                |                |                | 0.069        | 9 1/10       | 0.628       |           |
| 總 計        | 559    |                       |                | 12             | 18             | 54             | 110            | 64             | 6              | 53             | 10             | 66             | 12             | 4              | 88             | 8\$ 0.086    | 9 1/3        | 0.803       |           |

工 資 和 工 作 時 間

### 女 工

| 職 務    | 調查人數 | 依 照 工 資 分 組 之 各 職 人 數 |            |            |            |            |            |            |            |            |            |            |            |            |            | 每小時平均工資率 | 每日平均工作時數         | 每日平均工資率          |          |
|--------|------|-----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------|------------------|------------------|----------|
|        |      | \$ .005-.0149         | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 |          |                  |                  | .145—    |
| 齊 梗 售工 | 11   |                       |            |            | 11         |            |            |            |            |            |            |            |            |            |            |          | \$ 0.049         | 10               | \$ 0.400 |
| 拆 板 ,, | 12   |                       |            |            |            |            |            |            | 12         |            |            |            |            |            |            | 0.089    | 9                | 0.729            |          |
| 裝 盒 ,, | 674  | 149                   | 258        | 157        | 106        |            |            | 1          | 1          | 2          |            |            |            |            |            | 0.024    | 9 $\frac{1}{10}$ | 0.218            |          |
| 刷 機 ,, | 25   |                       |            |            | 1          | 2          | 3          | 7          | 9          | 1          | 2          |            |            |            |            |          | 0.073            | 7 $\frac{1}{2}$  | 0.540    |
| 包 封 ,, | 96   | 8                     | 27         | 44         | 8          | 9          |            |            |            |            |            |            |            |            |            | 0.028    | 8                | 0.224            |          |
| 總 計    | 818  | 157                   | 285        | 201        | 126        | 11         | 3          | 8          | 22         | 3          | 2          |            |            |            |            |          | \$ 0.027         | 8 $\frac{1}{10}$ | \$ 0.240 |

### 童 工

| 職 務    | 調查人數 | 依 照 工 資 分 組 之 各 職 人 數 |            |            |            |            |            |            |            |            |            |            |            |            |            | 每小時平均工資率 | 每日平均工作時數         | 每日平均工資率  |          |
|--------|------|-----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------|------------------|----------|----------|
|        |      | \$ .005-.0149         | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 |          |                  |          | .145—    |
| 裝 盒 件工 | 318  | 25                    | 194        | 68         | 31         |            |            |            |            |            |            |            |            |            |            |          | \$ 0.028         | 8        | \$ 0.184 |
| 刷 機 時工 | 24   |                       |            |            |            | 20         | 4          |            |            |            |            |            |            |            |            | 0.052    | 9                | 0.468    |          |
| 總 計    | 342  | 25                    | 194        | 68         | 31         | 20         | 4          |            |            |            |            |            |            |            |            | \$ 0.025 | 8 $\frac{1}{10}$ | \$ 0.203 |          |



## 女 工

| 部名及職務 | 調查人數   | 依 照 工 資 分 組 之 各 職 人 數 |                |                |                |                |                |                |                |                |                |                |                |                |                | 每小時平均<br>均工資率 | 每日平均<br>工作時數 | 每日平均<br>工資率 |            |
|-------|--------|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------|-------------|------------|
|       |        | \$<br>.005-<br>.0149  | .015-<br>.0249 | .025-<br>.0349 | .035-<br>.0449 | .045-<br>.0549 | .055-<br>.0649 | .065-<br>.0749 | .075-<br>.0849 | .085-<br>.0949 | .095-<br>.1049 | .105-<br>.1149 | .115-<br>.1249 | .125-<br>.1349 | .135-<br>.1449 |               |              |             | .145-<br>— |
| 美術部   |        |                       |                |                |                |                |                |                |                |                |                |                |                |                |                |               |              |             |            |
| 貼 花   | 時工 52  |                       | 1              | 26             | 9              | 7              | 1              | 1              | 5              | 2              |                |                |                |                |                |               | \$ 0.043     | 9 ½         | \$ 0.396   |
|       | 件工 14  |                       |                | 2              |                | 9              |                |                | 3              |                |                |                |                |                |                |               | 0.054        | 7 ½         | 0.405      |
| 推 花   | 時工 101 | 1                     | 5              | 23             | 23             | 24             | 12             | 7              | 4              | 2              |                |                |                |                |                |               | 0.046        | 9 ½         | 0.423      |
|       | 件工 4   |                       |                |                |                | 4              |                |                |                |                |                |                |                |                |                |               | 0.050        | 7 ¾         | 0.375      |
| 包裝部   |        |                       |                |                |                |                |                |                |                |                |                |                |                |                |                |               |              |             |            |
| 雜 務   | 時工 15  |                       |                |                |                | 9              | 2              | 2              | 1              | 1              |                |                |                |                |                |               | 0.059        | 9           | 0.581      |
| 總 計   | 186    | 1                     | 6              | 51             | 32             | 53             | 15             | 10             | 13             | 5              |                |                |                |                |                |               | \$ 0.047     | 9           | \$ 0.423   |

## 童 工

| 部名及職務 | 調查人數  | 依 照 工 資 分 組 之 各 職 人 數 |                |                |                |                |                |                |                |                |                |                |                |                |                | 每小時平均<br>均工資率 | 每日平均<br>工作時數 | 每日平均<br>工資率 |            |
|-------|-------|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------|-------------|------------|
|       |       | \$<br>.005-<br>.0149  | .015-<br>.0249 | .025-<br>.0349 | .035-<br>.0449 | .045-<br>.0549 | .055-<br>.0649 | .065-<br>.0749 | .075-<br>.0849 | .085-<br>.0949 | .095-<br>.1049 | .105-<br>.1149 | .115-<br>.1249 | .125-<br>.1349 | .135-<br>.1449 |               |              |             | .145-<br>— |
| 製坯部   |       |                       |                |                |                |                |                |                |                |                |                |                |                |                |                |               |              |             |            |
| 製 坯   | 時工 13 |                       |                | 2              | 11             |                |                |                |                |                |                |                |                |                |                |               | \$ 0.033     | 9           | \$ 0.342   |
| 塗 膠部  |       |                       |                |                |                |                |                |                |                |                |                |                |                |                |                |               |              |             |            |
| 塗 膠   | ,, 46 |                       |                | 23             | 23             |                |                |                |                |                |                |                |                |                |                |               | 0.035        | 9           | 0.315      |
| 總 計   | 59    |                       |                | 25             | 34             |                |                |                |                |                |                |                |                |                |                |               | \$ 0.036     | 9           | \$ 0.324   |

第三十二表 VII. 紡織工業目：縲絲業各職平均工資率及工作時數表

## 男 工

| 職 務 | 調查人數   | 依 照 工 資 分 組 之 各 職 人 數 |            |            |            |            |            |            |            |            |            |            |            |            |            | 每小時平均工資率 | 每日平均工作時數 | 每日平均工資率 |          |
|-----|--------|-----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------|----------|---------|----------|
|     |        | \$ .005-.0149         | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 |          |          |         | .145—    |
| 機 務 | 時工 72  |                       |            |            | 1          | 17         | 27         | 12         | 4          | 1          | 5          | 1          | 3          |            |            | 1        | \$ 0.068 | 12      | \$ 0.816 |
| 雜 務 | ,, 446 |                       |            |            |            |            | 446        |            |            |            |            |            |            |            |            |          | 0.060    | 12      | 0.720    |
| 總 計 | 518    |                       |            |            | 1          | 17         | 473        | 12         | 4          | 1          | 5          | 1          | 3          |            |            | 1        | \$ 0.061 | 12      | \$ 0.732 |

## 女 工

| 職 務 | 調查人數     | 依 照 工 資 分 組 之 各 職 人 數 |            |            |            |            |            |            |            |            |            |            |            |            |            | 每小時平均工資率 | 每日平均工作時數 | 每日平均工資率 |          |
|-----|----------|-----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------|----------|---------|----------|
|     |          | \$ .005-.0149         | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 |          |          |         | .145—    |
| 抄 繭 | 時工 1,700 |                       | 56         | 618        | 791        | 98         | 137        |            |            |            |            |            |            |            |            |          | \$ 0.038 | 11      | \$ 0.418 |
| 長 工 | ,, 9,214 |                       |            | 2          | 42         | 4,786      | 4,384      |            |            |            |            |            |            |            |            |          | 0.055    | 11      | 0.605    |
| 替 工 | ,, 2,351 |                       |            | 485        | 1,551      | 306        | 9          |            |            |            |            |            |            |            |            |          | 0.039    | 11      | 0.429    |
| 扯 吐 | ,, 853   |                       |            | 548        | 305        |            |            |            |            |            |            |            |            |            |            |          | 0.034    | 11      | 0.374    |
| 整 絲 | ,, 525   |                       |            | 22         | 23         | 84         | 380        | 16         |            |            |            |            |            |            |            |          | 0.057    | 11      | 0.627    |
| 總 計 | 14,643   |                       | 56         | 1,675      | 2,712      | 5,274      | 4,910      | 16         |            |            |            |            |            |            |            |          | \$ 0.049 | 11      | \$ 0.539 |

童 工

| 職 務    | 調查人數     | 依 照 工 資 分 組 之 各 職 人 數 |       |       |       |       |       |       |       |       |       |       |       |       |       | 每小時平均工資率 | 每日平均工作時數 | 每日平均工資率 |          |
|--------|----------|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|----------|---------|----------|
|        |          | \$ .005-              | .015- | .025- | .035- | .045- | .055- | .065- | .075- | .085- | .095- | .105- | .115- | .125- | .135- |          |          |         | .145-    |
| 縲絲(盆工) | 時工 4,632 |                       | 16    | 4,456 | 189   | 1     |       |       |       |       |       |       |       |       |       |          | \$ 0.030 | 11      | \$ 0.330 |
| 扯 吐    | ,, 32    |                       |       | 12    | 14    | 5     | 1     |       |       |       |       |       |       |       |       |          | 0.038    | 11      | 0.418    |
| 整 絲    | ,, 179   |                       | 22    | 70    | 83    | 2     | 2     |       |       |       |       |       |       |       |       |          | 0.034    | 11      | 0.374    |
| 總 計    | 4,873    |                       | 38    | 4,538 | 286   | 8     | 3     |       |       |       |       |       |       |       |       |          | \$ 0.030 | 11      | \$ 0.330 |

第三十三表 VII. 紡織工業目：棉紡業平均工資率及工作時數表

男 工

| 部名及職務 | 調查人數   | 依 照 工 資 分 組 之 各 職 人 數 |            |            |            |            |            |            |            |            |            |            |            |            |            | 每小時平均工資率 | 每日平均工作時數 | 每日平均工資率 |          |     |          |
|-------|--------|-----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------|----------|---------|----------|-----|----------|
|       |        | \$ .005-.0149         | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 |          |          |         | .145—    |     |          |
| 清花部   |        |                       |            |            |            |            |            |            |            |            |            |            |            |            |            |          |          |         |          |     |          |
| 值花車   | 時工 249 |                       | 1          | 48         | 179        | 21         |            |            |            |            |            |            |            |            |            |          |          |         | \$ 0.039 | 12  | \$ 0.463 |
| 值彈花車  | ,, 469 |                       |            | 51         | 375        | 39         | 3          | 1          |            |            |            |            |            |            |            |          |          |         | 0.040    | 12  | 0.480    |
| 其他值車  | ,, 106 |                       |            | 45         | 61         |            |            |            |            |            |            |            |            |            |            |          |          |         | 0.036    | 12  | 0.432    |
| 梳棉部   |        |                       |            |            |            |            |            |            |            |            |            |            |            |            |            |          |          |         |          |     |          |
| 抄鋼絲   | ,, 216 |                       |            | 15         | 75         | 114        | 9          |            | 3          |            |            |            |            |            |            |          |          |         | 0.046    | 12  | 0.552    |
| 值鋼絲車  | ,, 417 |                       |            | 68         | 336        | 11         | 1          | 1          |            |            |            |            |            |            |            |          |          |         | 0.039    | 12  | 0.468    |
| 其他    | ,, 163 |                       | 1          | 37         | 121        | 3          |            | 1          |            |            |            |            |            |            |            |          |          |         | 0.038    | 12  | 0.456    |
| 粗紗部   |        |                       |            |            |            |            |            |            |            |            |            |            |            |            |            |          |          |         |          |     |          |
| 頭目    | ,, 65  |                       |            | 2          | 24         | 15         | 11         | 6          | 5          | 1          | 1          |            |            |            |            |          |          |         | 0.053    | 12  | 0.636    |
| 值棉條車  | ,, 11  |                       |            |            | 11         |            |            |            |            |            |            |            |            |            |            |          |          |         | 0.040    | 12  | 0.480    |
| 值粗紗車  | ,, 66  |                       | 12         | 32         | 17         | 3          | 2          |            |            |            |            |            |            |            |            |          |          |         | 0.033    | 12  | 0.396    |
| 其他    | ,, 373 |                       | 23         | 105        | 204        | 34         | 4          | 1          | 2          |            |            |            |            |            |            |          |          |         | 0.037    | 12  | 0.444    |
| 細紗部   |        |                       |            |            |            |            |            |            |            |            |            |            |            |            |            |          |          |         |          |     |          |
| 頭目    | ,, 48  |                       |            | 8          | 15         | 7          | 8          | 8          | 2          |            |            |            |            |            |            |          |          |         | 0.050    | 12  | 0.600    |
| 值細紗車  | ,, 7   |                       | 5          | 1          | 1          |            |            |            |            |            |            |            |            |            |            |          |          |         | 0.024    | 12  | 0.288    |
| 收擺筒管  | ,, 189 |                       | 39         | 97         | 39         | 5          |            |            |            |            |            |            |            |            |            |          |          |         | 0.031    | 12  | 0.372    |
| 其他    | ,, 491 |                       |            | 157        | 240        | 81         | 6          | 7          |            |            |            |            |            |            |            |          |          |         | 0.039    | 12  | 0.468    |
| 搖紗部   |        |                       |            |            |            |            |            |            |            |            |            |            |            |            |            |          |          |         |          |     |          |
| 其他    | ,, 334 |                       |            | 80         | 226        | 15         | 13         |            |            |            |            |            |            |            |            |          |          |         | 0.039    | 12  | 0.468    |
| 成包部   |        |                       |            |            |            |            |            |            |            |            |            |            |            |            |            |          |          |         |          |     |          |
| 稱紗    | ,, 62  |                       |            | 23         | 27         | 5          | 1          |            | 6          |            |            |            |            |            |            |          |          |         | 0.041    | 12  | 0.492    |
| 打包    | ,, 105 |                       | 15         | 27         | 25         | 8          | 4          | 4          | 9          | 3          | 9          |            |            |            |            | 1        |          |         | 0.048    | 11½ | 0.552    |
| 其他    | 件工 311 | 14                    | 8          | 19         | 32         | 27         | 26         | 39         | 29         | 52         | 33         | 26         | 11         | 1          | 2          | 1        |          |         | 0.071    | 11½ | 0.845    |
| 其他    | 時工 65  |                       | 3          | 27         | 28         | 5          |            |            | 1          | 1          |            |            |            |            |            |          |          |         | 0.037    | 12  | 0.444    |

|     |    |       |    |     |      |      |      |     |     |     |     |     |    |    |    |    |    |         |                  |          |
|-----|----|-------|----|-----|------|------|------|-----|-----|-----|-----|-----|----|----|----|----|----|---------|------------------|----------|
| 揀花部 |    |       |    |     |      |      |      |     |     |     |     |     |    |    |    |    |    |         |                  |          |
| 揀花  | ,, | 85    |    | 29  | 4    | 1    |      |     |     |     |     |     | 1  |    |    |    |    | 0.084   | 12               | 0.408    |
| 件工  |    | 42    |    |     |      |      | 1    |     |     |     |     | 3   | 20 | 3  | 15 |    |    | 0.119   | 8                | 0.952    |
| 準備部 |    |       |    |     |      |      |      |     |     |     |     |     |    |    |    |    |    |         |                  |          |
| 保全  | 時工 | 1,780 | 2  | 5   | 310  | 544  | 470  | 222 | 120 | 46  | 32  | 13  | 5  | 3  | 5  | 1  | 2  | 0.048   | 12               | 0.576    |
| 司機  | ,, | 263   |    | 1   | 9    | 45   | 50   | 73  | 29  | 23  | 5   | 15  | 7  |    | 2  | 6  |    | 0.063   | 12               | 0.756    |
| 工匠  | ,, | 789   |    | 17  | 49   | 94   | 84   | 98  | 113 | 139 | 79  | 34  | 38 | 15 | 18 | 4  | 7  | 0.070   | 9 $\frac{1}{10}$ | 0.679    |
| 雜務  | ,, | 911   |    | 11  | 405  | 404  | 68   | 11  | 6   | 5   |     | 1   |    |    |    |    |    | 0.037   | 12               | 0.444    |
| 總計  |    | 7558  | 16 | 141 | 1644 | 3127 | 1066 | 493 | 336 | 261 | 176 | 104 | 97 | 32 | 24 | 25 | 16 | \$0.047 | 11 $\frac{3}{4}$ | \$ 0.552 |





|     |    |        |     |       |       |       |       |       |     |     |    |    |   |   |   |  |  |          |        |          |
|-----|----|--------|-----|-------|-------|-------|-------|-------|-----|-----|----|----|---|---|---|--|--|----------|--------|----------|
| 其他  | ,, | 33     |     | 1     | 29    | 3     |       |       |     |     |    |    |   |   |   |  |  | 0.081    | 12     | 0.372    |
| 揀花部 | 件工 | 4      |     |       | 4     |       |       |       |     |     |    |    |   |   |   |  |  | 0.030    | 12     | 0.360    |
| 揀花  | 時工 | 123    |     | 35    | 77    | 9     | 2     |       |     |     |    |    |   |   |   |  |  | 0.028    | 12     | 0.336    |
| 其他  | 件工 | 478    | 11  | 84    | 290   | 68    | 15    | 10    |     |     |    |    |   |   |   |  |  | 0.030    | 12     | 0.360    |
| 其他  | 時工 | 9      |     |       | 8     | 1     |       |       |     |     |    |    |   |   |   |  |  | 0.081    | 12     | 0.372    |
| 準備部 |    |        |     |       |       |       |       |       |     |     |    |    |   |   |   |  |  |          |        |          |
| 雜務  | ,, | 169    |     | 77    | 72    | 19    | 1     |       |     |     |    |    |   |   |   |  |  | 0.027    | 12     | 0.324    |
| 總計  |    | 27,574 | 669 | 3,047 | 8,003 | 8,898 | 4,762 | 1,338 | 548 | 174 | 85 | 42 | 6 | 1 | 1 |  |  | \$ 0.038 | 119/10 | \$ 0.452 |



第三十四表 VII. 紡織工業目：絲織業各部各職平均工資率及工作時數表

男 工

| 部名及職務   | 調查人數  | 依 照 工 資 分 組 之 各 職 人 數 |          |          |          |          |          |          |          |          |          |          |          |          |          |      | 每小時平均工資率 | 每日平均工作時數 | 每日平均工資率  |
|---------|-------|-----------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------|----------|----------|----------|
|         |       | .01-.029              | .03-.049 | .05-.069 | .07-.089 | .09-.109 | .11-.129 | .13-.146 | .15-.169 | .17-.189 | .19-.209 | .21-.229 | .23-.249 | .25-.269 | .27-.289 | .29- |          |          |          |
| 經 部     |       |                       |          |          |          |          |          |          |          |          |          |          |          |          |          |      |          |          |          |
| 絡 絲 時工  | 61    | 9                     | 19       | 25       | 2        | 4        | 2        |          |          |          |          |          |          |          |          |      | \$ 0.053 | 10 7/10  | \$ 0.567 |
| 煮 漿 ,,  | 116   | 15                    | 33       | 63       | 5        |          |          |          |          |          |          |          |          |          |          |      | 0.059    | 10 6/10  | 0.530    |
| 值整經車 ,, | 58    | 8                     | 14       | 6        | 11       | 1        | 1        | 1        | 4        | 1        | 5        | 5        |          |          |          | 1    | 0.096    | 10 6/10  | 1.018    |
| 結 頭 ,,  | 14    |                       | 3        | 6        | 1        |          | 2        |          | 1        | 1        |          |          |          |          |          |      | 0.081    | 10 6/10  | 0.859    |
| 緯 部     |       |                       |          |          |          |          |          |          |          |          |          |          |          |          |          |      |          |          |          |
| 拚 頭 ,,  | 7     |                       | 5        | 2        |          |          |          |          |          |          |          |          |          |          |          |      | 0.046    | 10 1/2   | 0.483    |
| 打 線 ,,  | 38    | 7                     | 15       | 16       |          |          |          |          |          |          |          |          |          |          |          |      | 0.045    | 10 1/2   | 0.473    |
| 值拈緯車 ,, | 16    | 3                     | 4        | 8        |          | 1        |          |          |          |          |          |          |          |          |          |      | 0.050    | 10 6/10  | 0.530    |
| 織綢部     |       |                       |          |          |          |          |          |          |          |          |          |          |          |          |          |      |          |          |          |
| 織 工 ,,  | 22    |                       | 17       | 4        | 1        |          |          |          |          |          |          |          |          |          |          |      | 0.045    | 10 6/10  | 0.477    |
| 件工      | 617   |                       | 12       | 18       | 47       | 48       | 44       | 88       | 138      | 100      | 33       | 39       | 24       | 17       | 11       | 17   | 0.159    | 10 4/10  | 1.654    |
| 機務部     |       |                       |          |          |          |          |          |          |          |          |          |          |          |          |          |      |          |          |          |
| 司 機 時工  | 6     |                       | 2        | 2        | 2        |          |          |          |          |          |          |          |          |          |          |      | 0.069    | 11       | 0.669    |
| 雜 務 ,,  | 47    | 10                    | 10       | 12       | 13       | 1        | 1        |          |          |          |          |          |          |          |          |      | 0.055    | 10 1/2   | 0.573    |
| 總 計     | 1,002 | 52                    | 134      | 162      | 82       | 55       | 50       | 89       | 128      | 102      | 43       | 35       | 24       | 17       | 11       | 18   | \$ 0.120 | 10 1/2   | \$ 1.269 |

第二編 十八年之工資率與工作時間統計

## 女 工

| 部名及職務 | 調查人數   | 依 照 工 資 分 組 之 各 職 人 數 |          |          |          |          |          |          |          |          |          |          |          |          |          | 每小時平均<br>均工資率 | 每日平均<br>工作時數 | 每日平均<br>工資率 |          |
|-------|--------|-----------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------------|--------------|-------------|----------|
|       |        | \$.01-.029            | .03-.049 | .05-.069 | .07-.089 | .09-.109 | .11-.129 | .13-.149 | .15-.169 | .17-.189 | .19-.209 | .21-.229 | .23-.249 | .25-.269 | .27-.289 |               |              |             | .29-     |
| 經 部   |        |                       |          |          |          |          |          |          |          |          |          |          |          |          |          |               |              |             |          |
| 絡 絲   | 時工 159 | 43                    | 76       | 38       | 2        |          |          |          |          |          |          |          |          |          |          |               |              |             | \$ 0.040 |
| 拏 頭   | ,, 19  |                       | 12       | 6        | 1        |          |          |          |          |          |          |          |          |          |          |               |              |             | 0.048    |
| 值整經車  | ,, 43  | 1                     | 22       | 16       | 4        |          |          |          |          |          |          |          |          |          |          |               |              |             | 0.051    |
| 緯 部   |        |                       |          |          |          |          |          |          |          |          |          |          |          |          |          |               |              |             |          |
| 絡 絲   | ,, 11  |                       | 10       | 1        |          |          |          |          |          |          |          |          |          |          |          |               |              |             | 0.042    |
| 拏 頭   | ,, 9   |                       | 6        | 3        |          |          |          |          |          |          |          |          |          |          |          |               |              |             | 0.047    |
| 值拏緯車  | ,, 51  | 3                     | 28       | 16       | 4        |          |          |          |          |          |          |          |          |          |          |               |              |             | 0.048    |
| 機部    |        |                       |          |          |          |          |          |          |          |          |          |          |          |          |          |               |              |             |          |
| 織 工   | 件工 274 | 1                     | 2        | 21       | 30       | 39       | 64       | 49       | 24       | 9        | 16       | 5        | 3        | 5        | 5        | 1             |              |             | 0.133    |
| 總 計   | 566    | 48                    | 176      | 101      | 41       | 89       | 64       | 49       | 24       | 9        | 16       | 5        | 3        | 5        | 5        | 1             |              |             | \$ 0.086 |

第三十五表 XII. 紡織工業目：棉織業各部各職平均工資率及工作時數表

男 工

| 部名及職務 | 調查人數  | 依 照 工 資 分 組 之 各 職 人 數 |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            | 每小時平均工資率 | 每日平均工作時數 | 每日平均工資率      |              |       |       |
|-------|-------|-----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------|----------|--------------|--------------|-------|-------|
|       |       | .005-.0149            | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 | .145-.1549 | .155-.1649 | .165-.1749 | .175-.1849 |          |          |              | .185-.195—   |       |       |
| 經緯部   |       |                       |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |          |          |              |              |       |       |
| 頭目時工  | 7     |                       |            |            |            | 2          | 1          | 3          |            |            | 1          |            |            |            |            |            |            |            |            |          | \$       | 0.07712      | \$           | 0.924 |       |
| 值經紗車  | 70    |                       | 1          | 17         | 16         | 20         | 11         | 1          |            | 4          |            |            |            |            |            |            |            |            |            |          |          | 0.04710 1/10 |              | 0.475 |       |
| 值筒子車  | 48    |                       |            | 2          | 44         | 2          |            |            |            |            |            |            |            |            |            |            |            |            |            |          |          | 0.04012      |              | 0.480 |       |
| 值漿紗車  | 54    |                       |            | 2          | 8          | 27         | 5          | 9          | 2          |            | 1          |            |            |            |            |            |            |            |            |          |          | 0.05410 3/4  |              | 0.581 |       |
| 其他件工  | 11    |                       |            |            |            | 5          | 3          | 1          |            | 2          |            |            |            |            |            |            |            |            |            |          |          | 0.06211      |              | 0.682 |       |
| 其他時工  | 188   |                       | 1          | 17         | 182        | 33         | 3          | 1          | 1          |            |            |            |            |            |            |            |            |            |            |          |          | 0.04111 1/2  |              | 0.484 |       |
| 織布部   |       |                       |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |          |          |              |              |       |       |
| 頭目    | 47    |                       |            |            | 4          |            | 2          | 40         |            |            |            | 1          |            |            |            |            |            |            |            |          |          | 0.06812      |              | 0.816 |       |
| 值布車   | 134   | 1                     |            | 39         | 29         | 20         | 7          | 23         | 9          | 5          |            | 1          |            | 1          | 2          |            |            |            |            |          |          | 0.05110 3/10 |              | 0.525 |       |
| 其他件工  | 776   | 2                     | 9          | 22         | 49         | 71         | 125        | 99         | 70         | 35         | 40         | 27         | 23         | 22         | 16         | 46         | 16         | 17         | 18         | 18       | 66       | 0.09710 9/10 |              | 1.057 |       |
| 其他時工  | 57    |                       |            | 6          | 43         | 7          |            |            |            | 1          |            |            |            |            |            |            |            |            |            |          |          | 0.04112 1/10 |              | 0.496 |       |
| 整理全部  |       |                       |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |          |          |              |              |       |       |
| 整理    | 347   |                       |            | 35         | 135        | 105        | 40         | 23         | 7          | 1          | 1          |            |            |            |            |            |            |            |            |          |          | 0.04710 3/10 |              | 0.484 |       |
| 其他件工  | 65    |                       |            | 2          | 30         | 10         | 2          | 1          | 2          | 2          | 4          | 1          |            | 1          | 2          |            | 8          |            |            |          |          | 0.06911 1/2  |              | 0.794 |       |
| 保全時工  | 497   |                       | 7          | 48         | 131        | 98         | 78         | 44         | 49         | 10         | 8          | 5          | 4          | 1          | 6          |            |            | 2          |            | 4        | 2        | 0.05311 3/5  |              | 0.673 |       |
| 雜務    | 257   |                       | 9          | 54         | 114        | 45         | 16         | 9          | 7          | 2          | 1          |            |            |            |            |            |            |            |            |          |          | 0.04311 1/5  |              | 0.482 |       |
| 總計    | 2,558 | 3                     | 27         | 244        | 726        | 443        | 294        | 249        | 150        | 62         | 55         | 35         | 25         | 25         | 26         | 46         | 24         | 19         | 18         | 19       | 63       | \$           | 0.06511 1/10 | \$    | 0.722 |

## 女 工

| 部名及<br>職務 | 調查人數  | 依 照 工 資 分 組 之 各 職 人 數 |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                | 每小時<br>平均工<br>資率 | 每日平<br>均工作<br>時數 | 每日平<br>均工資<br>率 |                |            |       |
|-----------|-------|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|------------------|-----------------|----------------|------------|-------|
|           |       | .005-<br>.0149        | .015-<br>.0249 | .025-<br>.0349 | .035-<br>.0449 | .045-<br>.0549 | .055-<br>.0659 | .065-<br>.0749 | .075-<br>.0849 | .085-<br>.0949 | .095-<br>.1049 | .105-<br>.1149 | .115-<br>.1249 | .125-<br>.1349 | .135-<br>.1449 | .145-<br>.1549 | .155-<br>.1649 | .165-<br>.1749 | .175-<br>.1849 |                  |                  |                 | .185-<br>.1949 | .195-<br>— |       |
| 經緯部       |       |                       |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                  | \$               |                 | \$             |            |       |
| 頭目時工 8    |       |                       |                |                |                |                | 5              | 2              |                |                | 1              |                |                |                |                |                |                |                |                |                  | 0.078            | 12              | 0.986          |            |       |
| 值經紗車      | 14    |                       |                | 2              | 2              | 9              |                | 1              |                |                |                |                |                |                |                |                |                |                |                |                  | 0.048            | 11 1/10         | 0.571          |            |       |
| 件工 314    | 11    | 36                    | 21             | 90             | 51             | 56             | 29             | 17             | 6              | 2              | 4              |                |                |                |                |                |                |                |                |                  | 0.048            | 11 3/8          | 0.557          |            |       |
| 值筒子車      | 80    |                       | 2              | 5              | 7              | 20             | 15             | 1              | 7              | 23             |                |                |                |                |                |                |                |                |                |                  | 0.063            | 11 1/8          | 0.743          |            |       |
| 件工 188    | 7     | 23                    | 26             | 41             | 38             | 12             | 27             | 11             | 3              |                |                |                |                |                |                |                |                |                |                |                  | 0.046            | 11 1/10         | 0.511          |            |       |
| 值紆子車      | 226   |                       | 11             | 41             | 43             | 62             | 24             | 17             | 13             | 5              | 3              | 4              |                | 2              | 1              |                |                |                |                |                  | 0.051            | 9 1/8           | 0.469          |            |       |
| 綜, 974    | 36    | 68                    | 156            | 185            | 178            | 144            | 103            | 64             | 22             | 7              | 11             |                |                |                |                |                |                |                |                |                  | 0.049            | 11              | 0.589          |            |       |
| 穿綜, 190   | 3     | 6                     | 42             | 50             | 25             | 19             | 15             | 10             | 12             | 6              | 2              |                |                |                |                |                |                |                |                |                  | 0.050            | 11 3/8          | 0.583          |            |       |
| 其他時工 12   |       |                       |                | 12             |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                  | 0.030            | 12              | 0.360          |            |       |
| 件工 96     | 4     | 27                    | 23             | 30             | 11             |                | 1              |                |                |                |                |                |                |                |                |                |                |                |                | 0.032            | 11 9/10          | 0.331           |                |            |       |
| 織布部       |       |                       |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                  |                  |                 |                |            |       |
| 頭目時工 131  |       |                       |                | 16             | 9              | 24             | 28             | 52             | 1              | 1              |                |                |                |                |                |                |                |                |                |                  | 0.067            | 12              | 0.862          |            |       |
| 值布車       | 4,827 | 48                    | 408            | 816            | 1,141          | 1,170          | 633            | 381            | 127            | 61             | 25             | 17             |                |                |                |                |                |                |                |                  | 0.046            | 11 1/8          | 0.543          |            |       |
| 整理保全部     |       |                       |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                  |                  |                 |                |            |       |
| 整理時工 46   |       |                       |                | 1              | 37             | 8              |                |                |                |                |                |                |                |                |                |                |                |                |                |                  | 0.042            | 11 3/10         | 0.475          |            |       |
| 件工 8      |       |                       |                | 2              |                |                | 1              | 2              |                | 3              |                |                |                |                |                |                |                |                |                |                  | 0.074            | 12              | 0.888          |            |       |
| 雜務時工 14   |       |                       |                | 12             | 2              |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                  | 0.031            | 12              | 0.372          |            |       |
| 總計        | 7,128 | 109                   | 581            | 1,159          | 1,644          | 1,581          | 927            | 599            | 336            | 133            | 47             | 39             |                | 2              | 1              |                |                |                |                |                  | \$               | 0.047           | 11 3/8         | \$         | 0.545 |

## 童 工

| 部名及<br>職務 | 調查人數   | 依 照 工 資 分 組 之 各 職 人 數 |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                | 每小時<br>平均工<br>資率 | 每日平<br>均工作<br>時數 | 每日平<br>均工資<br>率 |                |            |    |       |  |  |
|-----------|--------|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|------------------|-----------------|----------------|------------|----|-------|--|--|
|           |        | .005-<br>.0149        | .015-<br>.0249 | .025-<br>.0349 | .035-<br>.0449 | .045-<br>.0549 | .055-<br>.0649 | .065-<br>.0749 | .075-<br>.0849 | .085-<br>.0949 | .095-<br>.1049 | .105-<br>.1149 | .115-<br>.1249 | .125-<br>.1349 | .135-<br>.1449 | .145-<br>.1549 | .155-<br>.1649 | .165-<br>.1749 | .175-<br>.1849 |                  |                  |                 | .185-<br>.1949 | .195-<br>— |    |       |  |  |
| 經緯部       |        |                       |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                  |                  |                 |                |            |    |       |  |  |
| 值筒子車      | 件工 314 | 14                    | 99             | 87             | 72             | 31             | 8              | 3              |                |                |                |                |                |                |                |                |                |                |                |                  |                  | \$              | 0.031          | 11 7/10    | \$ | 0.363 |  |  |
| 其 他       | 時工 31  |                       | 2              | 16             | 12             |                |                |                | 1              |                |                |                |                |                |                |                |                |                |                |                  |                  |                 | 0.035          | 10 1/2     |    | 0.368 |  |  |
| 整理保<br>全部 |        |                       |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                  |                  |                 |                |            |    |       |  |  |
| 整 理       | ,, 29  |                       | 3              | 21             | 5              |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                  |                  |                 | 0.031          | 10         |    | 0.310 |  |  |
|           | 件工 20  | 1                     | 4              | 9              | 2              | 1              | 2              | 1              |                |                |                |                |                |                |                |                |                |                |                |                  |                  |                 | 0.034          | 12         |    | 0.408 |  |  |
| 總 計       | 394    | 15                    | 108            | 133            | 91             | 32             | 10             | 4              | 1              |                |                |                |                |                |                |                |                |                |                |                  |                  | \$              | 0.031          | 11 1/2     | \$ | 0.357 |  |  |



第三十六表 XII. 紡織工業目：針織業各部各職平均工資率及工作時數表

## 男 工

| 部名及職務      | 調查人數 | 依 照 工 資 分 組 之 各 職 人 數 |                |                |                |                |                |                |                |                |                |                |                |                |                |            | 每小時平均工資率 | 每日平均工作時數 | 每日平均工資率  |          |
|------------|------|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------|----------|----------|----------|----------|
|            |      | \$ —<br>.0249         | .025—<br>.0349 | .035—<br>.0449 | .045—<br>.0549 | .055—<br>.0649 | .065—<br>.0749 | .075—<br>.0849 | .085—<br>.0949 | .095—<br>.1049 | .105—<br>.1149 | .115—<br>.1249 | .125—<br>.1349 | .135—<br>.1449 | .145—<br>.1549 | .155—<br>— |          |          |          |          |
| <b>織工部</b> |      |                       |                |                |                |                |                |                |                |                |                |                |                |                |                |            |          |          |          |          |
| 值手搖機       | 時工   | 11                    | 1              | 2              |                | 1              | 1              | 1              | 1              |                | 4              |                |                |                |                |            | \$ 0.077 | 9 1/10   | \$ 0.791 |          |
|            | 件工   | 83                    |                |                | 1              |                |                | 6              | 3              | 19             | 9              | 15             | 1              | 13             | 9              | 7          |          | 0.119    | 8 5/8    | 1.047    |
| 值電機        | 時工   | 15                    |                | 2              | 2              | 2              |                | 1              | 1              | 2              | 3              | 1              |                |                |                |            | 0.085    | 10       | 0.850    |          |
|            | 件工   | 8                     |                |                | 3              | 2              | 1              |                |                |                | 1              |                |                | 1              |                |            | 0.075    | 11       | 0.825    |          |
| 縫 紉        | 時工   | 5                     |                |                |                |                |                | 2              | 2              |                | 1              |                |                |                |                |            | 0.090    | 10 1/8   | 0.918    |          |
|            | 件工   | 9                     |                | 1              |                |                |                | 2              |                | 1              |                | 1              | 3              |                | 1              |            | 0.107    | 10       | 1.070    |          |
| 其 他        | 時工   | 14                    |                |                | 1              | 5              | 5              | 2              | 1              |                |                |                |                |                |                |            | 0.068    | 10       | 0.680    |          |
|            | 件工   |                       |                |                |                |                |                |                |                |                |                |                |                |                |                |            |          |          |          |          |
| <b>整備部</b> |      |                       |                |                |                |                |                |                |                |                |                |                |                |                |                |            |          |          |          |          |
| 染 色        | ,,   | 58                    | 1              | 16             | 3              | 28             | 5              | 1              | 3              | 1              |                |                |                |                |                |            | 0.047    | 10 1/2   | 0.494    |          |
|            | ,,   | 93                    |                | 4              | 6              | 28             | 26             | 16             | 5              |                | 6              | 2              |                |                |                |            | 0.062    | 10 1/2   | 0.651    |          |
| 裝 配        | 件工   | 161                   | 5              | 7              | 13             | 7              | 14             | 7              | 13             | 7              | 3              | 9              | 27             | 11             | 10             | 19         | 9        | 0.098    | 10 3/10  | 1.009    |
|            | 時工   | 24                    | 5              | 3              | 9              | 5              | 2              |                |                |                |                |                |                |                |                |            | 0.038    | 10       | 0.380    |          |
| 司 機        | 件工   | 13                    |                | 2              | 4              | 1              |                |                |                |                |                |                |                | 2              | 1              | 3          |          | 0.086    | 9 1/2    | 0.817    |
|            | 時工   | 78                    | 2              | 19             | 7              | 7              | 6              | 10             | 4              | 6              | 5              | 1              | 3              |                | 2              |            | 6        | 0.067    | 10 3/4   | 0.720    |
| 總 計        |      | 572                   | 13             | 52             | 47             | 83             | 63             | 41             | 39             | 22             | 39             | 34             | 49             | 17             | 26             | 34         | 22       | \$ 0.081 | 10 1/10  | \$ 0.818 |

## 女 工

| 部名及職務 | 調查人數   | 依 照 工 資 分 組 之 各 職 人 數 |                |                |                |                |                |                |                |                |                |                |                |                |                | 每小時平均工資率 | 每日平均工作時數 | 每日平均工資率  |                  |          |
|-------|--------|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------|----------|----------|------------------|----------|
|       |        | \$—<br>.0249          | .025—<br>.0349 | .035—<br>.0449 | .045—<br>.0549 | .055—<br>.0649 | .065—<br>.0749 | .075—<br>.0849 | .085—<br>.0949 | .095—<br>.1049 | .105—<br>.1149 | .115—<br>.1249 | .125—<br>.1349 | .135—<br>.1449 | .145—<br>.1549 |          |          |          | .155—<br>—       |          |
| 搖工部   |        |                       |                |                |                |                |                |                |                |                |                |                |                |                |                |          |          |          |                  |          |
| 搖 紗   | 時工 35  | 2                     | 1              |                | 8              | 15             | 8              | 1              |                |                |                |                |                |                |                |          |          | \$ 0.057 | 9%               | \$ 0.547 |
|       | 件工 267 | 47                    | 30             | 25             | 43             | 46             | 48             | 17             | 3              | 3              | 1              |                |                |                |                |          | 4        | 0.052    | 9½               | 0.494    |
| 搖 絲   | 時工 30  | 4                     | 9              | 2              | 7              | 8              |                |                |                |                |                |                |                |                |                |          |          | 0.042    | 9%               | 0.406    |
|       | 件工 24  |                       | 2              | 14             | 7              | 1              |                |                |                |                |                |                |                |                |                |          |          | 0.043    | 9                | 0.387    |
| 織工部   |        |                       |                |                |                |                |                |                |                |                |                |                |                |                |                |          |          |          |                  |          |
| 值手搖機  | 時工 34  | 9                     | 6              | 6              | 3              | 4              | 3              | 3              |                |                |                |                |                |                |                |          |          | 0.042    | 10               | 0.420    |
|       | 件工 750 | 48                    | 52             | 50             | 115            | 96             | 58             | 65             | 54             | 33             | 68             | 49             | 6              | 13             | 4              | 39       |          | 0.075    | 9%               | 0.705    |
| 值電機   | ,, 65  | 1                     | 2              | 2              | 4              | 3              | 5              | 9              | 6              | 10             | 6              | 2              | 4              | 3              | 1              | 7        |          | 0.096    | 9% <sub>10</sub> | 0.950    |
| 縫 紉   | 時工 29  | 10                    | 2              | 11             |                | 3              | 2              | 1              |                |                |                |                |                |                |                |          |          | 0.038    | 10               | 0.380    |
|       | 件工 227 | 12                    | 25             | 27             | 24             | 30             | 18             | 13             | 7              | 13             | 14             | 13             | 14             | 2              | 7              | 8        |          | 0.074    | 10¼              | 0.759    |
| 整 備 部 |        |                       |                |                |                |                |                |                |                |                |                |                |                |                |                |          |          |          |                  |          |
| 染 色   | 時工 22  | 2                     | 13             | 1              | 3              | 1              |                | 1              | 1              |                |                |                |                |                |                |          |          | 0.039    | 9% <sub>10</sub> | 0.378    |
| 整 理   | ,, 72  | 17                    | 21             | 17             | 8              | 3              | 4              | 2              |                |                |                |                |                |                |                |          |          | 0.037    | 10%              | 0.385    |
|       | 件工 31  | 2                     | 3              | 2              | 7              | 5              | 3              | 5              | 1              | 1              | 1              |                | 1              |                |                |          |          | 0.061    | 9½               | 0.580    |
| 裝 配   | 時工 8   | 4                     | 2              | 1              | 1              |                |                |                |                |                |                |                |                |                |                |          |          | 0.029    | 10               | 0.290    |
| 總 計   | 1,594  | 158                   | 168            | 158            | 230            | 215            | 149            | 117            | 72             | 60             | 90             | 64             | 25             | 18             | 12             | 58       |          | \$ 0.066 | 9%               | \$ 0.634 |

第三十七表 VII. 紡織工業目：漂染業各職平均工資率及工作時數表  
男 工

| 職 務   | 調查人數   | 依 照 工 資 分 組 之 各 職 人 數 |       |       |       |       |       |       |       |       |       |       |       |       |       | 每小時平均工資率 | 每日平均工作時數 | 每日平均工資率 |          |
|-------|--------|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|----------|---------|----------|
|       |        | \$ —                  | .025  | .035  | .045  | .055  | .065  | .075  | .085  | .095  | .105  | .115  | .125  | .135  | .145  |          |          |         | .155     |
|       |        | .0249                 | .0349 | .0449 | .0549 | .0649 | .0749 | .0849 | .0949 | .1049 | .1149 | .1249 | .1349 | .1449 | .1549 | .1649    |          |         |          |
| 做 絲 光 | 時工 295 |                       |       | 21    | 43    | 42    | 78    | 89    | 15    | 7     |       |       |       |       |       |          | \$ 0.068 | 8 ¼     | \$ 0.598 |
| 染 色   | ,, 835 | 2                     | 162   | 233   | 168   | 81    | 61    | 109   | 10    | 3     | 3     |       |       | 3     |       |          | 0.051    | 7 ½     | 0.367    |
| 撇 紗   | ,, 204 |                       |       |       | 22    | 11    | 15    | 153   | 1     | 1     | 1     |       |       |       |       |          | 0.075    | 8 ¾     | 0.645    |
| 整 理   | ,, 109 | 1                     | 3     | 6     | 7     | 17    | 11    | 31    | 25    | 3     | 1     |       |       |       | 2     | 2        | 0.076    | 8 ¼     | 0.667    |
| 總 計   | 1,443  | 3                     | 165   | 260   | 240   | 151   | 165   | 382   | 51    | 14    | 5     |       |       | 3     | 2     | 2        | \$ 0.061 | 7 ¼     | \$ 0.468 |

第三十八表 VIII. 皮革品目：製革業各部各職平均工資率及工作時數表  
 男 工

| 部名及職務 | 調查人數   | 依 照 工 資 分 組 之 各 職 人 數 |                |                |                |                |                |                |                |                |                |                |                |                |                | 每小時平均工資率 | 每日平均工作時數 | 每日平均工資率 |            |
|-------|--------|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------|----------|---------|------------|
|       |        | \$—<br>.0149          | .015—<br>.0249 | .025—<br>.0349 | .035—<br>.0449 | .045—<br>.0549 | .055—<br>.0649 | .065—<br>.0749 | .075—<br>.0849 | .085—<br>.0949 | .095—<br>.1049 | .105—<br>.1149 | .115—<br>.1249 | .125—<br>.1349 | .135—<br>.1449 |          |          |         | .145—<br>— |
| 製皮部   |        |                       |                |                |                |                |                |                |                |                |                |                |                |                |                |          |          |         |            |
| 白皮    | 時工 149 |                       |                |                |                | 12             | 37             | 42             | 29             | 19             | 3              | 4              | 1              |                | 1              | 1        | \$ 0.073 | 9       | \$ 0.657   |
| 染皮    | „ 192  |                       |                | 5              | 29             | 77             | 35             | 23             | 11             | 4              | 5              | 2              |                |                | 1              | 0.067    | 9        | 0.693   |            |
| 值車    | „ 138  |                       |                |                | 11             | 10             | 51             | 26             | 16             | 8              | 5              | 5              | 4              |                | 2              | 0.070    | 9        | 0.630   |            |
| 其他    | „ 23   |                       |                | 2              | 1              | 12             | 6              | 1              | 1              |                |                |                |                |                |                | 0.053    | 9        | 0.477   |            |
| 機務部   |        |                       |                |                |                |                |                |                |                |                |                |                |                |                |                |          |          |         |            |
| 司機    | „ 12   |                       |                |                |                |                |                | 3              | 4              | 1              | 1              | 1              |                | 1              | 1              | 0.093    | 9        | 0.837   |            |
| 雜務    | „ 78   |                       |                |                |                | 17             | 42             | 13             | 2              | 3              | 1              |                |                |                |                | 0.062    | 9        | 0.558   |            |
| 總計    | 592    |                       |                | 2              | 17             | 80             | 213            | 120            | 75             | 42             | 14             | 15             | 7              | 1              | 1              | 5        | \$ 0.069 | 9       | \$ 0.621   |

第三十九表 IX. 飲食品目：麵粉業各職平均工資率及工作時數表  
男 工

| 職 務 | 調查人數   | 依 照 工 資 分 組 之 各 職 人 數 |                |                |                |                |                |                |                |                |                |                |                |                |                | 每小時平均工資率 | 每日平均工作時數 | 每日平均工資率 |            |
|-----|--------|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------|----------|---------|------------|
|     |        | \$<br>.005-<br>.0149  | .015-<br>.0249 | .025-<br>.0349 | .035-<br>.0449 | .045-<br>.0549 | .055-<br>.0649 | .065-<br>.0749 | .075-<br>.0849 | .085-<br>.0949 | .095-<br>.1049 | .105-<br>.1149 | .115-<br>.1249 | .125-<br>.1349 | .135-<br>.1449 |          |          |         | .145-<br>— |
| 下 麥 | 時工 159 |                       |                | 75             | 4              | 60             | 20             |                |                |                |                |                |                |                |                |          | \$ 0.042 | 11      | \$ 0.462   |
| 值 機 | ,, 427 |                       | 2              | 22             | 37             | 126            | 122            | 38             | 35             | 18             | 7              | 3              |                | 5              | 6              | 6        | 0.062    | 11      | 0.682      |
| 打 包 | ,, 369 |                       |                | 40             | 50             | 268            | 7              | 3              |                | 1              |                |                |                |                |                |          | 0.047    | 11      | 0.517      |
| 堆 粉 | ,, 180 |                       |                | 36             | 83             | 55             | 6              |                |                |                |                |                |                |                |                |          | 0.042    | 11      | 0.462      |
| 機 務 | ,, 48  |                       |                |                | 3              | 5              | 4              | 8              | 9              | 6              | 4              |                | 4              |                | 2              | 3        | 0.084    | 11      | 0.924      |
| 修 理 | ,, 34  |                       |                |                |                | 1              | 5              | 22             | 5              |                | 1              |                |                |                |                |          | 0.070    | 11      | 0.770      |
| 雜 務 | ,, 304 |                       |                | 87             | 53             | 143            | 11             | 7              | 2              | 1              |                |                |                |                |                |          | 0.044    | 11      | 0.484      |
| 總 計 | 1,521  |                       | 2              | 260            | 281            | 658            | 175            | 78             | 51             | 26             | 12             | 3              | 4              | 5              | 8              | 9        | \$ 0.051 | 11      | \$ 0.561   |

第四十表 IX. 飲食品目：榨油業各職平均工資率及工作時數表

## 男 工

| 職 務 | 調查人數       | 依 照 工 資 分 組 之 各 職 人 數 |            |            |            |            |            |            |            |            |            |            |            |            |            | 每小時平均工資率 | 每日平均工作時數         | 每日平均工資率          |          |
|-----|------------|-----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------|------------------|------------------|----------|
|     |            | \$ .005-.0149         | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 |          |                  |                  | .145—    |
| 榨 油 | 時工 552     |                       | 26         | 18         | 77         | 186        | 108        | 6          | 7          | 129        |            |            |            |            |            |          | \$ 0.058         | 9 $\frac{7}{10}$ | \$ 0.568 |
|     | 件工 498     |                       |            |            |            |            |            |            |            | 498        |            |            |            |            |            |          | 0.090            | 6                | 0.540    |
| 清 油 | 時工 66      |                       |            | 7          |            | 11         | 46         | 2          |            |            |            |            |            |            |            |          | 0.055            | 11               | 0.605    |
|     | 機 務 ,, 142 |                       |            | 4          |            | 52         | 19         | 8          | 24         | 16         |            | 13         | 1          |            |            | 5        | 0.071            | 10 $\frac{2}{3}$ | 0.758    |
| 修 理 | 雜 務 ,, 49  |                       |            |            | 26         | 3          | 5          | 1          | 7          | 5          |            |            |            |            |            |          | 0.058            | 11 $\frac{1}{5}$ | 0.650    |
|     | 雜 務 ,, 114 |                       | 15         | 2          | 54         | 38         | 4          |            |            |            |            | 1          |            |            |            |          | 0.042            | 11               | 0.462    |
| 總 計 | 1,421      |                       | 41         | 31         | 157        | 299        | 177        | 17         | 38         | 648        |            | 14         | 1          | 2          | 5          | \$ 0.069 | 8 $\frac{7}{10}$ | \$ 0.600         |          |

第四十一表 XI. 飲食品目：製蛋業各職平均工資率及工作時數表

## 男 工

| 職 務   | 調查人數   | 依 照 工 資 分 組 之 各 職 人 數 |                |                |                |                |                |                |                |                |                |                |                |                |                | 每小時平均<br>工資率 | 每日平均<br>工作時數 | 每日平均<br>工資率       |            |
|-------|--------|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------|--------------|-------------------|------------|
|       |        | \$<br>.005-<br>.0149  | .015-<br>.0249 | .025-<br>.0349 | .035-<br>.0449 | .045-<br>.0549 | .055-<br>.0649 | .065-<br>.0749 | .075-<br>.0849 | .085-<br>.0949 | .095-<br>.1049 | .105-<br>.1149 | .115-<br>.1249 | .125-<br>.1349 | .135-<br>.1449 |              |              |                   | .145-<br>— |
| 收 蛋   | 時工 61  |                       |                |                |                |                | 39             | 15             | 5              |                |                | 2              |                |                |                |              | \$ 0.066     | 9                 | \$ 0.594   |
| 照 蛋   | ,, 48  |                       |                |                |                | 18             | 11             | 6              | 9              | 2              | 1              |                |                | 1              |                |              | 0.065        | 9                 | 0.585      |
| 拷 蛋   | ,, 27  |                       |                |                |                |                |                | 19             | 6              |                | 2              |                |                |                |                |              | 0.074        | 9                 | 0.666      |
| 灌廳冷氣  | ,, 116 |                       |                |                |                | 2              | 39             | 51             | 29             | 2              | 1              |                |                |                | 1              |              | 0.069        | 9                 | 0.621      |
| 烘 蛋 白 | ,, 10  |                       |                |                | 10             |                |                |                |                |                |                |                |                |                |                |              | 0.040        | 9                 | 0.036      |
| 裝 箱   | ,, 23  |                       |                |                |                |                | 15             | 8              |                |                |                |                |                |                |                |              | 0.03         | 9                 | 0.567      |
| 工匠雜務  | ,, 56  |                       |                |                | 7              | 14             | 17             | 2              | 2              | 1              | 9              | 1              |                | 1              | 2              |              | 0.068        | 10 ¼              | 0.734      |
| 計 總   | 341    |                       |                |                | 17             | 34             | 121            | 101            | 42             | 5              | 18             | 3              |                | 2              | 3              |              | \$ 0.067     | 9 ¾ <sub>10</sub> | \$ 0.623   |

女 工

| 職 務               | 調查人數   | 依 照 工 資 分 組 之 各 職 人 數 |            |            |            |            |            |            |            |            |            |            |            |            |            | 每小時平均工資率 | 每日平均工作時數 | 每日平均工資率 |          |
|-------------------|--------|-----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------|----------|---------|----------|
|                   |        | \$.005-.0149          | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 |          |          |         | .145—    |
| 照 蛋<br>拷 蛋<br>裝 箱 | 時工 214 |                       |            |            | 28         | 147        | 36         | 1          |            |            |            | 1          | 1          |            |            |          | \$ 0.051 | 9       | \$0.459  |
|                   | 526    |                       |            |            | 68         | 337        | 101        | 19         | 1          |            |            |            |            |            |            |          | 0.051    | 9       | 0.459    |
|                   | 24     |                       |            |            |            | 24         |            |            |            |            |            |            |            |            |            |          | 0.050    | 9       | 0.450    |
| 總 計               | 764    |                       |            |            | 96         | 508        | 1 37       | 20         | 1          |            |            | 1          | 1          |            |            |          | \$ 0.051 | 9       | \$ 0.459 |



第四十二表 IX. 飲食品目：煙草業各部各職平均工資率及工作時數表  
男 工

| 部名及職務 | 調查人數   | 依 照 工 資 分 組 之 各 職 人 數 |            |            |            |            |            |            |            |            |            |            |            |            |            | 每小時平均工資率 | 每日平均工作時數 | 每日平均工資率  |          |          |
|-------|--------|-----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------|----------|----------|----------|----------|
|       |        | \$ .005-.0149         | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 |          |          |          | .145—    |          |
| 煙葉部   |        |                       |            |            |            |            |            |            |            |            |            |            |            |            |            |          |          |          |          |          |
| 葉 烘   | 時工 86  |                       |            | 1          | 1          | 6          | 23         | 15         | 26         | 11         | 3          |            |            |            |            |          |          | \$ 0.072 | 10       | \$ 0.720 |
| 拍 葉   | ,, 162 |                       |            |            | 15         | 6          | 39         | 37         | 39         | 6          | 2          | 1          | 1          | 3          | 9          | 4        |          | 0.075    | 10       | 0.750    |
| 砌 葉   | ,, 84  |                       |            |            |            |            | 15         | 21         | 23         | 12         | 3          |            |            |            |            |          |          | 0.077    | 10       | 0.770    |
| 製煙部   |        |                       |            |            |            |            |            |            |            |            |            |            |            |            |            |          |          |          |          |          |
| 捲 煙   | ,, 611 |                       |            | 19         | 28         | 19         | 28         | 136        | 78         | 59         | 69         | 94         | 56         | 20         | 11         | 14       |          | 0.087    | 10%      | 0.922    |
| 焙 煙   | ,, 55  |                       |            |            |            | 2          | 27         | 23         | 5          |            |            |            |            |            |            |          |          | 0.065    | 10%      | 0.676    |
| 揀 煙   | ,, 49  |                       |            |            |            | 25         | 21         | 2          | 1          |            |            |            |            |            |            |          |          | 0.056    | 11       | 0.616    |
| 包裝部   |        |                       |            |            |            |            |            |            |            |            |            |            |            |            |            |          |          |          |          |          |
| 包 煙   | ,, 23  |                       |            |            |            |            | 2          | 1          | 1          | 2          | 10         | 6          | 1          |            |            |          |          | 0.097    | 8 ¼      | 0.800    |
| 裝 罐   | ,, 15  |                       |            |            | 9          | 2          |            | 1          | 3          |            |            |            |            |            |            |          |          | 0.051    | 10       | 0.510    |
| 製 箱   | ,, 96  |                       |            |            |            | 3          | 15         | 33         | 34         | 9          | 2          |            |            |            |            |          |          | 0.074    | 10 ½     | 0.755    |
| 機務部   |        |                       |            |            |            |            |            |            |            |            |            |            |            |            |            |          |          |          |          |          |
| 司 機   | ,, 11  |                       |            |            |            |            | 4          | 1          | 2          | 3          | 1          |            |            |            |            |          |          | 0.076    | 10 ¼     | 0.768    |
| 修 理   | ,, 67  |                       |            | 1          | 2          | 1          | 2          | 39         | 8          | 1          | 2          |            | 4          |            | 3          | 4        |          | 0.081    | 10%      | 0.859    |
| 雜 務   | ,, 97  |                       |            |            | 1          | 21         | 21         | 17         | 35         |            | 1          | 1          |            |            |            |          |          | 0.068    | 10%      | 0.707    |
| 總 計   | 1,356  |                       |            | 21         | 56         | 85         | 197        | 326        | 253        | 113        | 93         | 102        | 42         | 23         | 23         | 22       | \$ 0.079 | 10%      | \$ 0.822 |          |

工 資 和 工 作 時 間

## 女 工

| 部名及<br>職務  | 調查人數      | 依 照 工 資 分 組 之 各 職 人 數 |                |                |                |                |                |                |                |                |                |                |                |                |                | 每小時平<br>均工資率 | 每日平均<br>工作時數 | 每日平均<br>工資率 |            |
|------------|-----------|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------|--------------|-------------|------------|
|            |           | \$<br>.005-<br>.0149  | .015-<br>.0249 | .025-<br>.0349 | .035-<br>.0449 | .045-<br>.0549 | .055-<br>.0649 | .065-<br>.0749 | .075-<br>.0849 | .085-<br>.0949 | .095-<br>.1049 | .105-<br>.1149 | .115-<br>.1249 | .125-<br>.1349 | .135-<br>.1449 |              |              |             | .145-<br>— |
| 烟業部<br>拍 葉 | 時工 200    |                       |                | 24             | 20             | 18             | 8              | 71             | 56             | 3              |                |                |                |                |                |              | \$ 0.063     | 8¾          | \$ 0.551   |
|            | 件工 355    |                       |                |                |                | 5              | 7              | 36             | 13             | 67             | 9              | 193            | 1              | 22             |                | 2            | 0.100        | 7%          | 0.749      |
| 製烟部<br>捲 烟 | 時工 92     |                       | 1              | 3              | 4              | 13             | 22             | 15             | 10             | 5              | 7              | 3              | 1              | 2              |                | 6            | 0.074        | 10¼         | 0.747      |
|            | ,, 189    |                       |                |                | 4              | 54             | 118            | 13             |                |                |                |                |                |                |                |              | 0.057        | 10          | 0.570      |
| 揀 烟        | ,, 38     |                       |                |                | 33             |                |                |                |                |                |                |                |                |                |                |              | 0.040        | 10          | 0.400      |
|            | 包裝部       |                       |                |                |                |                |                |                |                |                |                |                |                |                |                |              |              |             |            |
| 包 烟        | 時工 16     |                       |                | 12             | 2              | 1              | 1              |                |                |                |                |                |                |                |                |              | 0.034        | 10          | 0.340      |
|            | 件工 3,198  | 86                    | 389            | 329            | 259            | 348            | 134            | 462            | 54             | 576            | 193            | 46             | 22             | 149            | 60             | 100          | 0.066        | 8¾          | 0.518      |
| 裝 罐        | 時工 21     |                       |                |                | 20             | 1              |                |                |                |                |                |                |                |                |                |              | 0.040        | 10          | 0.400      |
|            | 件工 93     |                       |                |                |                |                |                |                |                |                |                | 22             | 71             |                |                |              | 0.118        | 9           | 1.062      |
| 裝 箱        | 時工 11     | 1                     | 2              | 3              | 2              |                | 1              |                | 1              | 1              |                |                |                |                |                |              | 0.041        | 10          | 0.410      |
|            | 時工 4      |                       |                | 1              | 2              | 1              |                |                |                |                |                |                |                |                |                |              | 0.040        | 10          | 0.400      |
| 製 匣        | 件工 189    |                       |                | 5              | 1              |                | 29             | 10             | 82             | 5              | 19             | 6              | 6              | 20             | 3              | 3            | 0.087        | 5½          | 0.479      |
|            | 總 計 4,401 | 87                    | 352            | 377            | 347            | 441            | 329            | 607            | 216            | 657            | 223            | 270            | 101            | 184            | 63             | 111          | \$ 0.070     | 8¾          | \$ 0.581   |

童 工

| 部名及職務 | 調查人數 | 依 照 工 資 分 組 之 各 職 人 數 |            |            |            |            |            |            |            |            |            |            |            |            |            | 每小時平均工資率 | 每日平均工作時數 | 每日平均工資率  |         |          |
|-------|------|-----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------|----------|----------|---------|----------|
|       |      | \$ .015-.0149         | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 |          |          |          | .145—   |          |
| 烟葉部   |      |                       |            |            |            |            |            |            |            |            |            |            |            |            |            |          |          |          |         |          |
| 拍 葉時工 | 21   |                       |            | 6          | 3          | 10         | 2          |            |            |            |            |            |            |            |            |          |          | \$ 0.044 | 10      | \$ 0.440 |
| 製烟部   |      |                       |            |            |            |            |            |            |            |            |            |            |            |            |            |          |          |          |         |          |
| 捲 烟時工 | 76   |                       |            | 15         | 38         | 23         |            |            |            |            |            |            |            |            |            |          |          | 0.041    | 10 1/10 | 0.414    |
| 包裝部   |      |                       |            |            |            |            |            |            |            |            |            |            |            |            |            |          |          |          |         |          |
| 包 烟時工 | 16   |                       |            |            | 12         | 4          |            |            |            |            |            |            |            |            |            |          |          | 0.043    | 9       | 0.387    |
| 總 計   | 113  |                       |            | 21         | 53         | 37         | 2          |            |            |            |            |            |            |            |            |          |          | \$ 0.042 | 9 1/10  | \$ 0.416 |

第四十三表 X. 造紙印刷目：造紙業各部各職平均工資率及工作時數表

男 工

| 部名及職務 | 調查人數   | 依 照 工 資 分 組 之 各 職 人 數 |                |                |                |                |                |                |                |                |                |                |                |                |                | 每小時平均<br>均工資率 | 每日平均<br>工作時數 | 每日平均<br>工資率 |           |
|-------|--------|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------|-------------|-----------|
|       |        | \$<br>.005-<br>.0149  | .015-<br>.0249 | .025-<br>.0349 | .035-<br>.0449 | .045-<br>.0549 | .055-<br>.0649 | .065-<br>.0749 | .075-<br>.0849 | .085-<br>.0949 | .095-<br>.1049 | .105-<br>.1149 | .115-<br>.1249 | .125-<br>.1349 | .135-<br>.1449 |               |              |             | .145<br>— |
| 原料部   |        |                       |                |                |                |                |                |                |                |                |                |                |                |                |                |               |              |             |           |
| 揀布    | 時工 29  |                       |                | 1              | 2              | 23             | 3              |                |                |                |                |                |                |                |                |               |              |             | \$ 0.059  |
| 剪彈    | ,, 85  |                       |                |                | 15             | 14             | 4              | 1              | 1              |                |                |                |                |                |                |               |              |             | 11        |
| 蒸責    | ,, 62  |                       |                |                | 8              | 31             | 13             | 6              | 2              | 1              |                |                | 1              |                |                |               |              | 0.055       |           |
| 打料    | ,, 179 |                       |                |                | 28             | 87             | 37             | 10             | 6              | 2              | 3              | 2              | 1              | 2              |                |               | 1            | 0.056       |           |
| 製造部   |        |                       |                |                |                |                |                |                |                |                |                |                |                |                |                |               |              |             |           |
| 製紙    | ,, 123 |                       | 3              | 7              | 12             | 22             | 30             | 21             | 9              | 8              | 3              | 1              | 3              | 4              |                |               |              | 0.064       |           |
| 接紙    | ,, 15  |                       |                | 10             | 5              |                |                |                |                |                |                |                |                |                |                |               |              | 11          |           |
| 數選    | ,, 81  |                       | 1              | 6              | 4              | 23             | 30             | 13             | 2              | 2              |                |                |                |                |                |               |              | 0.033       |           |
| 棧務部   |        |                       |                |                |                |                |                |                |                |                |                |                |                |                |                |               |              |             |           |
| 司機    | ,, 128 |                       |                |                |                | 23             | 61             | 22             | 7              | 5              |                | 4              | 5              |                |                |               | 1            | 0.067       |           |
| 修理    | ,, 92  |                       | 1              | 3              | 7              | 8              | 9              | 10             | 18             | 15             | 7              | 5              | 3              | 4              |                |               | 2            | 0.079       |           |
| 雜務    | ,, 48  |                       |                |                | 26             | 19             | 2              |                | 1              |                |                |                |                |                |                |               |              | 10 3/4      |           |
| 總計    | 792    |                       | 5              | 27             | 107            | 250            | 189            | 83             | 46             | 38             | 13             | 12             | 13             | 10             | 3              | 1             |              | \$ 0.060    |           |

## 女 工

| 部名及職務      | 調查人數   | 依 照 工 資 分 組 之 各 職 人 數 |                |                |                |                |                |                |                |                |                |                |                |                |                | 每小時平均<br>均工資率 | 每日平均<br>工作時數 | 每日平均<br>工資率 |           |
|------------|--------|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------|-------------|-----------|
|            |        | \$<br>.005-<br>.0149  | .015-<br>.0249 | .025-<br>.0349 | .035-<br>.0449 | .045-<br>.0549 | .055-<br>.0649 | .065-<br>.0749 | .075-<br>.0849 | .085-<br>.0949 | .095-<br>.1049 | .105-<br>.1149 | .115-<br>.1249 | .125-<br>.1349 | .135-<br>.1449 |               |              |             | .145<br>— |
| 原料部<br>揀 布 | 時工 238 |                       |                | 196            | 42             |                |                |                |                |                |                |                |                |                |                |               | \$ 0.032     | 11          | \$ 0.352  |
| 製造部<br>接 紙 | 時工 32  |                       |                | 27             | 1              | 4              |                |                |                |                |                |                |                |                |                |               | 0.033        | 11          | 0.363     |
| 總 計        | 270    |                       |                | 223            | 43             | 4              |                |                |                |                |                |                |                |                |                |               | \$ 0.032     | 11          | \$0.352   |



## 女 工

| 部名及職務 | 調查人數   | 依 照 工 資 分 組 之 各 職 人 數 |              |              |              |              |              |              |              |              |              |              |              |              |              | 每小時平均<br>均工資率 | 每日平均<br>工作時數 | 每日平均<br>工資率 |                  |          |
|-------|--------|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|--------------|-------------|------------------|----------|
|       |        | \$ —<br>.049          | .05—<br>.069 | .07—<br>.089 | .09—<br>.109 | .11—<br>.129 | .13—<br>.149 | .15—<br>.169 | .17—<br>.189 | .19—<br>.209 | .21—<br>.229 | .23—<br>.249 | .25—<br>.269 | .27—<br>.289 | .29—<br>.309 |               |              |             | .31<br>—         |          |
| 鉛印部   |        |                       |              |              |              |              |              |              |              |              |              |              |              |              |              |               |              |             |                  |          |
| 鑄 字   | 時工 12  |                       |              | 1            | 11           |              |              |              |              |              |              |              |              |              |              |               |              | \$ 0.098    | 8                | \$ 0.784 |
| 裝 訂   | 時工 37  | 31                    | 6            |              |              |              |              |              |              |              |              |              |              |              |              |               |              | 0.043       | 8½               | 0.366    |
|       | 件工 185 |                       |              | 5            | 62           | 64           | 52           | 2            |              |              |              |              |              |              |              |               |              | 0.118       | 8                | 0.944    |
| 石印部   |        |                       |              |              |              |              |              |              |              |              |              |              |              |              |              |               |              |             |                  |          |
| 圖 畫   | 件工 18  |                       |              |              | 16           | 2            |              |              |              |              |              |              |              |              |              |               |              | 0.102       | 8                | 0.816    |
| 裝 切   | 時工 9   |                       |              | 1            | 8            |              |              |              |              |              |              |              |              |              |              |               |              | 0.098       | 8                | 0.784    |
| 藝術製版部 |        |                       |              |              |              |              |              |              |              |              |              |              |              |              |              |               |              |             |                  |          |
| 照 相   | 時工 5   |                       |              |              | 2            | 2            | 1            |              |              |              |              |              |              |              |              |               |              | 0.116       | 8                | 0.928    |
| 製 凹 版 | 22     |                       | 15           |              | 7            |              |              |              |              |              |              |              |              |              |              |               |              | 0.073       | 8¼               | 0.608    |
| 總 計   | 288    | 31                    | 21           | 7            | 106          | 68           | 58           | 2            |              |              |              |              |              |              |              |               |              | \$ 0.102    | 8¼ <sub>10</sub> | \$ 0.826 |

## 童 工

| 部名及職務 | 調查人數  | 依 照 工 資 分 組 之 各 職 人 數 |              |              |              |              |              |              |              |              |              |              |              |              |              | 每小時平均工資率 | 每日平均工作時數 | 每日平均工資率 |           |
|-------|-------|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------|----------|---------|-----------|
|       |       | \$ —<br>.049          | .05—<br>.069 | .07—<br>.089 | .09—<br>.109 | .11—<br>.129 | .13—<br>.149 | .15—<br>.169 | .17—<br>.189 | .19—<br>.209 | .21—<br>.229 | .23—<br>.249 | .25—<br>.269 | .27—<br>.289 | .29—<br>.309 |          |          |         | .31—<br>— |
| 鉛印部   |       |                       |              |              |              |              |              |              |              |              |              |              |              |              |              |          |          |         |           |
| 排 字   | 時工 10 | 10                    |              |              |              |              |              |              |              |              |              |              |              |              |              |          | \$ 0.040 | 11 ½    | \$ 0.460  |
| 印 刷   | 時工 10 | 9                     | 1            |              |              |              |              |              |              |              |              |              |              |              |              |          | 0.042    | 13 ½    | 0.567     |
|       | 件工 16 | 16                    |              |              |              |              |              |              |              |              |              |              |              |              |              |          | 0.040    | 11 ½    | 0.460     |
| 石印部   |       |                       |              |              |              |              |              |              |              |              |              |              |              |              |              |          |          |         |           |
| 圖 畫   | 時工 4  | 4                     |              |              |              |              |              |              |              |              |              |              |              |              |              |          | 0.040    | 12 ¾    | 0.510     |
| 製 版   | „ 20  | 18                    | 2            |              |              |              |              |              |              |              |              |              |              |              |              |          | 0.042    | 12 ½    | 0.518     |
| 印 刷   | „ 40  | 39                    | 1            |              |              |              |              |              |              |              |              |              |              |              |              |          | 0.041    | 10 ¼    | 0.420     |
| 藝術部   |       |                       |              |              |              |              |              |              |              |              |              |              |              |              |              |          |          |         |           |
| 照 相   | 時工 4  | 4                     |              |              |              |              |              |              |              |              |              |              |              |              |              |          | 0.040    | 8 ½     | 0.340     |
|       | 件工 15 | 15                    |              |              |              |              |              |              |              |              |              |              |              |              |              |          | 0.040    | 11 ½    | 0.460     |
| 製 版   | 時工 6  | 5                     | 1            |              |              |              |              |              |              |              |              |              |              |              |              |          | 0.043    | 8 ½     | 0.366     |
| 總 計   | 125   | 120                   | 5            |              |              |              |              |              |              |              |              |              |              |              |              |          | \$ 0.041 | 10 ½    | 0.418     |



**各業平均工資率及工作時數表之分析** 如果把上海特別市各業平均工資率及工作時數表內各業每小時平均工資率依照工資等級重行排列，其情形有如下述：

一、每小時平均工資率自一分至五分者——有玻璃業的童工，製皂業的女工，火柴業的女工及童工，搪瓷業的女工及童工，繅絲業的女工及童工，棉紡業的男工女工及童工，棉織業的女工及童工，煙草業的童工，造紙業的女工及印刷業的童工。

二、每小時平均工資率自五分至一角者——有鋸木翻砂機器等業的男工，玻璃製皂火柴搪瓷繅絲等業的男工，絲織業的女工，棉織業的男工，針織業的男工及女工漂染製革麵粉榨油等業的男工，製蛋及煙草業的男工及女工和造紙業的男工。

三、每小時平均工資率自一角至一角五分者——有造船絲織等業的男工和印刷業的男工及女工。

至於各業工資率，何以有這樣的等別？則有下列三個重要原因：

一、技能問題——技能問題，又可以分做三層推究：（1）工作關係。茲以繅絲業及絲織業的工資率為例。繅絲和絲織兩業，同屬紡織工業，但絲織工作要比繅絲工作的技能為高，織綢工作，非學習六個月不能擔當，學習期滿之後，只給工資半數，再過一年，方可有領取全部工資資格，但是繅絲工作祇有車間和絲間兩部，需要一些練習與經驗，其他各部，大抵不需要何等的技能，所以這兩業的工資率有顯著的差異。（2）性別與年齡關係，男工的氣力比較女工或童工的氣力大，所以粗笨的繁重的工作，大都由男工擔任。男工的智力也比較女工為高，所以那些不甚需要思考的和程序比較簡略的工作，大都由女工或童工擔任。大抵女工或童工的工資比男工為低，一半就是因為他們的性別或年齡的關係。（3）工作時間關係。對於某種工作擔任的時期愈久，則所得工資也應愈多。有些廠家對於在廠工作年代久長的工人，訂有獎勵辦法，推其用意，當以重視有技能的工人為主因。

二、營業問題——在印刷業內，商務印書館的工資為最高。固然牠的內部工作，比較其他廠家精緻，所以有技能的工人，需要較多，牠的營業範圍亦較廣闊，待遇工人的辦法也即比較其他廠家為優。但是棉紡業各廠規模都很大，而工資率並不很高，也

是因為棉紡廠家所需技能，比較上尚不能稱為過高。其他如纜絲業的情形，也和棉紡業的情形相仿。

三、調查時期問題——此次工資率調查，規定九月二十五日為調查時期。雖然這個日期是從常態的月份中慎重選出的，而統計的結果也確然可以代表常態時期中的情形，但是變態時期中之特殊情形，似尚未可表現出來。因為廠家在工作忙迫和營業清淡的時候，或增加工人的薪金或添雇臨時工人或減少工人，對於平均工資數都很有影響，所以我們於舉辦工資率統計之外，仍舊要繼續舉辦工人實際收入統計，這也是一個重要原因。

以上的分析辦法，是從工業方面着手，即在一業之中各職之間，也可以分種種等級出來。現在以棉紡業男工（每小時平均自一分至五分）鋸木業男工（每小時平均五分至一角）及造船業男工（每小時自一角至一角五分）之工資率為例。棉紡業男工各職的每小時平均工資率，以揀花部的件工為最高，凡 \$0.119，成包部打包計件工人次之凡 \$0.071，準備部之工匠又次之，凡 \$0.070，又次為司機工人凡 \$0.063，又次為各部頭目（粗紗部 \$0.053，細紗部 \$0.050）。鋸木業男工以司機之每小時平均工資率為最高，凡 \$0.114，其次為木工，凡 \$0.065，最後是雜務，凡 \$0.063。造船業男工，以打銅之每小時平均工資率為最高，凡 \$0.136，鉗工及木模工人略低，凡 \$0.135，又次為車工，凡 \$0.115，而以傳習生為最少。僅有 \$0.030。各職之間，工資率差異如此，也正和各業之間差異的理由一樣，其中尤以技能問題為重要。譬如絲織、造船、印刷三業，本來是比較的有技能的工業，一業工資，固較他業為高，然一業之中各職的工資未必均高，在高工資之上，猶有較高的工資，在低工資之下，亦或有較低的工資，所以各業的工資之高低，只是相對的而不是絕對的。

各業工作時間，也可以分做下列種種等級：

- 一、每日平均工作時數在七小時至八小時之間者——有漂染業的男工。
- 二、每日平均工作時數在八小時至九小時之間者——有玻璃業的男工及童工，火柴業的女工及童工，榨油業的男工，煙草業的女工，和印刷業的男工及女工。
- 三、每日平均工作時數在九小時至十小時之間者——有鋸木、翻砂、機器、和造

船等業的男工，製皂業的男工及女工，火柴業的男工，搪瓷業的男工女工及童工，針織業的女工，製革業的男工，製蛋業的男工及女工，和煙草業的童工。

四、每日平均工作時數在十小時至十一小時之間者——有絲織業的男工及女工，針織業的男工，煙草業的男工和印刷業的童工。

五、每日平均工作時數在十一小時至十二小時之間者——有繅絲、棉紡和棉織等業的男工女工及童工、麵粉業的男工和造紙業的男工及女工。

查閱第二十三表，知道本市各業中工人數目最多的，首推棉紡業，計 110,882 人，其次為繅絲業，計 51,376 人，又次為棉織業，計 29,244 人，這三業的工人數總計 191,502 人，占二十一業的總數 285,700 的百分之 67。這三業的每日平均工作時數，均在十一小時至十二小時之間，<sup>註一</sup>其餘各業的每日平均工作時數在十一小時以下的雖然很多，而在八小時以下的僅有漂染業，全業人數不過 2,914 人，僅占二十一業總人數百分之 1.02，至於玻璃業的每日平均工作時數，雖恰巧為八小時，但全業人數亦僅 3,043 人，占二十一業總人數百分之 1.07。

又查棉紡繅絲和棉織三業的男工女工及童工的每小時平均工資率，均在一角以下，換言之，就二十一業工廠工人數而言，百分之 67 的工資是很低的。其在一角以上的，有造船業的男工(5,994 人)，絲織業的男工(2,563 人)和印刷業的男工(9,455 人)和女工(630 人)。這三業工資在一角以上的工人，共計 18,642 人，僅占二十一業總人數百分之 65。

印刷業的每日平均工作時數是在八小時以上，造船業在九小時以上，絲織業則在十小時以上，情形雖較棉紡繅絲和棉織三業為優。但因人數占百分數較少，影響似尚不十分嚴重。

下面便是我們所分析的第二種表格，即上海特別市各業平均工資率及工作時數簡表。

註一 每日工作時數以自十一小時至十二小時為最多，但此僅限於此次所調查的工廠。至於手工業工場中的工人，每日工作時數，也有在十二小時以上的。

第四十五表 上海特別市各業平均工資率及工作時數簡表

| 工業分類          | 工人類別 | 調查人數   | 每小時<br>平均工資率 | 每日<br>平均工作時數 | 每日<br>平均工資率 |
|---------------|------|--------|--------------|--------------|-------------|
| I. 木材製造目      |      |        |              |              |             |
| 鋸木業           | 男    | 1,183  | \$ 0.069     | 9            | \$ 0.621    |
| II. 冶煉工業目     |      |        |              |              |             |
| 翻砂業           | 男    | 540    | 0.086        | 9            | 0.774       |
| III. 機器及金屬製品目 |      |        |              |              |             |
| 機器業           | 男    | 2,958  | 0.087        | 9            | 0.783       |
| IV. 交通用具目     |      |        |              |              |             |
| 造船業           | 男    | 2,040  | 0.113        | 9            | 1.017       |
| V. 土石製造目      |      |        |              |              |             |
| 玻璃業           | { 男  | 466    | 0.084        | 8            | 0.672       |
|               | 女    | 449    | 0.040        | 8            | 0.320       |
| VI. 化學工業目     |      |        |              |              |             |
| 製皂業           | { 男  | 568    | 0.059        | 9 1/2        | 0.543       |
|               | 女    | 241    | 0.035        | 9 1/2        | 0.322       |
| 火柴業           | { 男  | 559    | 0.086        | 9 1/2        | 0.803       |
|               | 女    | 818    | 0.027        | 8 9/10       | 0.240       |
|               | 童    | 342    | 0.025        | 8 1/10       | 0.203       |
| 搪瓷業           | { 男  | 1,007  | 0.059        | 9 2/5        | 0.555       |
|               | 女    | 186    | 0.047        | 9            | 0.423       |
|               | 童    | 59     | 0.036        | 9            | 0.324       |
| VII. 紡織工業目    |      |        |              |              |             |
| 縲絲業           | { 男  | 518    | 0.061        | 12           | 0.732       |
|               | 女    | 14,643 | 0.049        | 11           | 0.539       |
|               | 童    | 4,873  | 0.030        | 11           | 0.330       |
| 棉紡業           | { 男  | 7,558  | 0.047        | 11 3/4       | 0.552       |
|               | 女    | 27,574 | 0.038        | 11 9/10      | 0.452       |
|               | 童    | 1,161  | 0.025        | 12           | 0.300       |
| 絲織業           | { 男  | 1,002  | 0.120        | 10 1/2       | 1.260       |
|               | 女    | 566    | 0.086        | 10 2/5       | 0.894       |
| 棉織業           | { 男  | 2,558  | 0.065        | 11 1/10      | 0.722       |
|               | 女    | 7,128  | 0.047        | 11 3/5       | 0.545       |
|               | 童    | 394    | 0.031        | 11 1/2       | 0.357       |

|            |     |       |       |                   |       |
|------------|-----|-------|-------|-------------------|-------|
| 針織業        | { 男 | 572   | 0.081 | 10 $\frac{1}{10}$ | 0.818 |
|            | { 女 | 1,594 | 0.066 | 9%                | 0.684 |
| 漂染業        | 男   | 1,448 | 0.060 | 7%                | 0.468 |
| VIII. 製革品目 |     |       |       |                   |       |
| 製革業        | 男   | 592   | 0.069 | 9                 | 0.061 |
| IX. 飲食品目   |     |       |       |                   |       |
| 麵粉業        | 男   | 1,521 | 0.051 | 11                | 0.561 |
| 榨油業        | 男   | 1,421 | 0.069 | 8 $\frac{7}{10}$  | 0.600 |
| 製蛋業        | { 男 | 841   | 0.067 | 9 $\frac{3}{10}$  | 0.623 |
|            | { 女 | 764   | 0.051 | 9                 | 0.459 |
| 烟草業        | { 男 | 1,356 | 0.079 | 10%               | 0.822 |
|            | { 女 | 4,401 | 0.070 | 8 $\frac{3}{10}$  | 0.581 |
|            | { 童 | 118   | 0.042 | 9 $\frac{1}{10}$  | 0.416 |
| X. 造紙印刷目   |     |       |       |                   |       |
| 造紙業        | { 男 | 792   | 0.060 | 11                | 0.660 |
|            | { 女 | 270   | 0.032 | 11                | 0.352 |
| 印刷業        | { 男 | 2,058 | 0.146 | 8%                | 1.226 |
|            | { 女 | 288   | 0.102 | 8 $\frac{1}{10}$  | 0.826 |
|            | { 童 | 125   | 0.041 | 10 $\frac{1}{10}$ | 0.418 |

又從各業男女童工平均工資率簡表(見後面第四十六表),知道各業男工每小時平均工資率為\$0.073,女工為\$0.044,童工為\$0.034,假使以每日八小時計算,男工每天的平均工資為\$0.584,女工為\$0.352,童工為\$0.272。又假使以每月三十日計算,男工每月的平均工資為\$17.52,女工每月為\$10.56,童工每月為\$8.16。這種假設,還是指工資率而言,和實際收入是有差別的。

**各業男女童工每小時平均工資率分配簡表之分析** 至於何以有差別?這個問題,將要牽涉到工資率和實際收入統計的內容了。正因為兩者內容之不同,有時工資率統計的結果要比實際收入數為低,有時也要超過一些,如果統計的結果,恰恰相等,則更可以說是偶然的事實。這個問題在第一編內已有詳細的討論,讀者可參閱,不過我們要附帶聲明的,就是這每小時的男工女工或童工平均工資率並不是指數,指數因權數未定,編製尙非其時,其所以於各業和各職的平均數之外,又有男工女工或童工的

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平均數之編製，並無其他目的，不過希望讀者可以得到更深切的印象罷了。

假使我們下了這樣的一個武斷的結論：就是「上海特別市各業工廠工人的工資率是比較很低的，工作時數是很多的，」或許不背事實罷。但是目前所感困難的，就是上海的工人生活費指數，本局尙未編製就緒，究竟這樣低微的工資是不是足夠維持工人的實際生活，當然不可隨意的論斷。假使我們要拿上海工人的工資和工作時間情形和任何其他國家如美國的情形相比較，那末，我們的說法，縱使武斷，或許是容許的。下面是各業男女童工平均工資率簡表：

第四十六表 各業男女童工平均工資率簡表  
(甲) 男 工

| (1) 組 別   | \$ .02-<br>.029 | .03-<br>.039 | .04-<br>.049 | .05-<br>.059 | .06-<br>.069 | .07-<br>.079 | .08-<br>.089 | .09-<br>.099 | .10-<br>.109 | .11-<br>.119 | .12-<br>.129 | .13-<br>.139 | 總 計      |
|-----------|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------|
| (2) 人 數   |                 |              | 7,558        | 3,096        | 8,848        | 1,356        | 5,095        |              |              | 2,040        | 1,002        | 2,058        | 31,058   |
| (1) × (2) |                 |              | 340.110      | 170.280      | 575.120      | 101.700      | 433.075      |              |              | 234.600      | 125.250      | 277.830      | 2257.965 |

平均數 \$ 0.073

## (乙) 女 工

| (1) 組 別   | \$ .02-<br>.029 | .03-<br>.039 | .04-<br>.049 | .05-<br>.059 | .06-<br>.069 | .07-<br>.079 | .08-<br>.089 | .09-<br>.099 | .10-<br>.109 | .11-<br>.119 | .12-<br>.129 | .13-<br>.139 | 總 計       |
|-----------|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------|
| (2) 人 數   | 818             | 28,085       | 21,957       | 764          | 1,594        | 4,401        | 566          |              | 288          |              |              |              | 58,478    |
| (1) × (2) | 20.450          | 982.975      | 988.065      | 42.020       | 103.610      | 330.075      | 48.110       |              | 30.240       |              |              |              | 2,545.545 |

平均數 \$ 0.044

## (丙) 童 工

| (1) 組 別   | \$ .02-<br>.029 | .03-<br>.039 | .04-<br>.049 | .05-<br>.059 | .06-<br>.069 | .07-<br>.079 | .08-<br>.089 | .09-<br>.099 | .10-<br>.109 | .11-<br>.119 | .12-<br>.129 | .13-<br>.139 | 總 計     |
|-----------|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|
| (2) 人 數   | 1,503           | 5,326        | 637          |              |              |              |              |              |              |              |              |              | 7,516   |
| (1) × (2) | 37.575          | 186.410      | 30.915       |              |              |              |              |              |              |              |              |              | 254.900 |

平均數 \$ 0.034

### 第三編

## 十八年之工人實際收入統計

### 第一章 工人實際收入概說

**十八年和十七年工人實際收入統計之分別** 十八年本市各業工廠工人逐月實際收入數，是繼續十七年編製的工作，所有關於搜集材料的方法編製的方法以及試辦的經過情形各方面，均詳載上海特別市工人工資指數之試編一書內，這裏不再重複說明。但是從形式方面說，十八年和十七年的工作，卻有兩個不同的地方：第一，十七年各月工人逐月實際收入是依照本局暫時擬定的工業分類法排列的，十八年的分類法是採自國際勞工局業務分類法一書中所擬訂的標準。本局本來把本市已經調查到的三十重要工業，依其業務性質，工資等級或工作情形分做五門，現在雖然把五門改做十一類，但三十業仍舊是固定的；所不同的，就是從前歸入某一門的工業，現在或許併入另一類，並且從前一門內所包括的業數和現在一類內所包括的業數也不同了，但是本局將來計算指數，純以男工女工或童工為單位，分門或分類，雖然有這樣的形式上的差異，實際對於計算指數工作並沒有什麼關礙的。第二，十七年所發表的各業工廠工人逐月實際收入，只是六個月的結果，十八年却是全年十二個月的結果。當我們分析十七年的逐月實際收入數的時候，因為時期太短，對於逐月實際收入變動的狀況，便覺得無從探究，十八年把十二個月的實際收入數發表出來，似乎比十七年的情形好一些；但是要研究長時期的變動趨勢，非有較長時期的材料不可，一兩年的材料，仍覺不夠應用的。因此，我們在未分析十八年的各業工廠工人逐月實際收入數之先，有一個重要的聲明不能不提出來。

**工人實際收入之變動比較工資率之變動為顯著** 工資率的變動，本來是極遲緩的，因為工人工資之增加或減少，不是勞資任何一方可以隨時隨意做到的，必須經過兩方協議的手續之後，才有效力。平時有些罷工案件，雖因要求增加工資未遂發生，



然而即使要求的目的完全達到，對於平均工資率未必一定有很顯著的影響，因為此種增加工資或許不是普遍的而是局部的——除非那些少數規模特別宏大的工廠發生這種情形，才會引起工資率的變動。工人實際收入，則變動無常，不僅隨着季節變化，即如獎金和分紅之發給、以及工作時數之增減、和日數之多寡等，都很有影響。除這幾個重要的原因之外，還有其他次要的原因，後面當再說明。不過我們要明白某種原因之發生，未必要在某一個月份內，並且某一個月的工人實際收入數之變動，或許不僅由於一個原因而由於多種原因的。所以每年工人逐月實際收入數變動的現象，也未必一定是整齊劃一的。這點要請讀者注意。

## 第二章 平均數逐月變動原因的推究

· **從大體觀察十八年的工人實際收入變動現象** 我們在下面一張表內，除將十八年各月各業工廠工人逐月實際收入數列入之外，又用加權算術平均法算出一個全年十二個月的平均逐月實際收入數，一併列入表內。這十二個月的平均逐月實際收入數，尚不是指數，我們計算牠們的目的，不過使讀者對於本市各業工廠工人通扯一個月內實際收入的情形更可以得到具體的了解。因此，我們可以把各業工廠工人逐月實際收入分做下列三個等級：

一、工人逐月實際收入在十元至十五元之間者——繅絲業、棉紡業、煙草業。

二、工人逐月實際收入在十五元至二十五元之間者——鋸木業、翻砂業、電機業、玻璃業、水泥磚瓦業、皂燭業、油漆業、火柴業、搪瓷業、化粧品業、棉織業、針織業、毛織業、漂染業、製革業、麵粉業、榨油業、製蛋業、冷飲食品業、造紙業。

三、工人逐月實際收入在二十五元至四十元之間者——機器業、造船業、電氣業、自來水業、絲織業、調味罐頭業、印刷業。

至於各業工廠工人逐月實際收入何以有這樣的等別，這完全是一個工作技能的問題。大率需要技能工作的工業，其工人工資必較不需要技能工作的工人工資為高，而尤以需要特殊技能者為甚。舉列而言，像印刷業的工作差不多都要有相當的技能，並且定要識字，所以逐月實際收入特高。又如機器業各部各職的工人，非由學徒升起，不能擔任機器製造工作，所以逐月實際收入也很高。又如絲織業織工非學習至六個月以上，不能上機，上機後，只給工資半數，一年以後，方才有領取全數工資的資格，所以該業逐月實際收入也很高。他如造船業電氣業的工人逐月實際收入之特高，也就是因為需要較高的技能的原故。再看工人逐月實際收入較低的各業，像繅絲業棉紡業的工作，並不需要若何專門技能，經過相當時期的練習，便可工作，又如火柴業和煙草業的工作，除了若干職務之外，技能是不重要的。加之該兩業的女工工作無定，出件數亦無定，所以逐月實際收入數特低（煙草業以女工為主要工人）。

又從各月工人逐月實際收入數，我們可以明白一年中逐月實際收入變動的情形，

從大體上觀察，這全年十二個月實際收入，可以發現一個重要的現象，就是一月、二月、七月、八月、和十二月的實際收入，或升得很高，或降得很低，我們可以稱之謂「變態的月份。」四月和五月、九月和十月的實際收入比較變動得少些，我們可以稱之謂「常態的月份。」這裏有一個要點請讀者注意，就是所謂變態和常態，只就大體上觀察，若詳為分析，當然能夠發現種種例外。譬如四月份的化粧品業的實際收入，在全年中為特高，七月份的搪瓷業的實際收入，在全年中為特低便是。至於這種變態和常態的現象因何而造成的，後面再當說明。

**從各業本身上個別觀察工人實際收入變動現象** 以上是從大體上觀察全年的逐月實際收入所發生的現象，現在再從各業的本身上個別去觀察，則各業逐月實際收入變動的現象，有如下述：各業工人逐月實際收入逐月變動較著者，有造船、火柴、絲織、針織、冷飲食品、煙草等業，各業工人逐月實際收入逐月變動甚微者，有翻砂、機器、水泥磚瓦、電氣、自來水、繅絲、漂染、麵粉、榨油等業。

十八年各月各業工廠工人逐月實際收入變動的現象既明，我們便可以推究變動的原因。茲先從造成變態和常態的月份的原因方面入手。在變態的月份中，尤以一月份和二月份變動得最顯著，其次為十二月，最後才是七八兩月份。各業工人逐月實際收入，以一月份為特高者，有機器、電機、水泥磚瓦、自來水、油漆、火柴、搪瓷、棉紡、造紙等九業，煙草業之男工亦然。各業工人逐月實際收入，以一月份為較高者，有鋸木、玻璃、繅絲、漂染、麵粉、榨油等六業。各業工人逐月實際收入，以二月份為特低者，有鋸木、機器、電機、造船、火柴、繅絲、絲織、棉織、針織、毛織、製革、製蛋、煙草等十三業，較低者，有翻砂、電氣、自來水、皂燭、榨油、造紙等六業。各業工人逐月實際收入以十二月為特高者，有電氣、調味罐頭、冷飲食品、機器（但比一月份略低）及印刷（但比六月份略低）等五業，而皂燭、絲織等業，也復以十二份為較高。至七八兩月工人逐月實際收入變態的程度，雖然沒有一月二月及十二月那樣的嚴重，但是各業各月實際收入，到了七月或八月的時候，差不多都有降低的傾向，現在把變動的原因分述於後：

**三個重要原因** 一、獎金分紅 獎金可以分做普通獎金及特別獎金兩種，升工，賞金等等，是普通獎金，是每月必有的獎金，年底雙薪、給假金等等，是特別獎金，或在

年底或在年初發給，而非每月所有的。分紅的性質，頗類特別獎金；不過發給分紅的時期，未必一定在每年年底或年初。有的廠家除每月發給普通獎金外，每年年底或年初，又發給特別獎金，也有每年或一次或兩次指定某月發給分紅的。然各廠並不一律如此，或者只有特別獎金，或者只有普通獎金，或者只有分紅，或者一切獎賞辦法都沒有的。獎金分紅制度之設立，亦無非在獎勵工人努力工作而已。普通獎金，既然是每月必有的，其影響於工人逐月實際收入，尚不為大，數量較大的特別獎金，對於逐月實際收入，則很有影響了。我們看了下面所記載的各業發給分紅或特別獎金的廠家之後，便知道各該業十八年一月和十二月實際收入特高或較高的原因了。一月份發給年底獎金或雙薪的廠家，機器業中有華東機器廠，電機業中有華生、益中及克來勝等廠，水泥磚瓦業中有華商水泥公司，自來水業中有閘北水電廠，油漆業中有振華、開林等廠（並增開夜工半月），火柴業中有中華、利民、榮昌（榮昌規定做滿三百六十天者，升工一月，做滿三百天者，升工五天）等廠，搪瓷業中有中華瑤瑯廠（女工沒有），棉紡業各廠均有年獎，造紙業中有龍章等廠，煙草業中有中和、和興等廠（女工沒有），以上各廠，或因為規模宏大，人數衆多，或因為特別獎金發給的數量較多，所以能使各該業該月實際收入之特別升高。他如玻璃業中之隆記料器廠，漂染業中之啓明、協成、大新、公昌等廠，麵粉業各廠，榨油業中之立德等廠，雖也發給特別獎金，但因各該廠工人數目在全業中所佔的成分不大，或因特別金獎的數量較少，或因只限於一部份的工人，所以各該月實際收入雖已提高，但不致特高，其原因即在此。但是鋸木業和纜絲業一月分實際收入較高的原因，並不在發給特別獎金或分紅，而在工作日數之較多。這個原因，後面還要提到的。十二月發給年獎和雙薪的廠家，電氣業中有華商電氣公司，調味罐頭業中有天一味精廠，冷飲食品業中有屈臣氏汽水公司，機器業中有中國鐵工廠（但不及一月份華東機器廠發給的數量多），印刷業中有商務印書館（但不及六月份發給分紅數量之多）和文明印刷局等廠。這就是造成各該業十二月份實際收入特高的原因。又十二月份的皂燭業中之五洲固本皂藥廠也發給一種給假金和年底獎金，不過只限於一部份工人，所以該業該月實際收入不致提得過高。

二、工作日數 是逐月實際收入變動的重要原因之一，這可以分兩方面說：廠內

有因營業清淡減少工作日數者，有因營業發達增加工作者，亦有因原料缺乏暫時停止工作若干日者。工作日數不足一月規定的日數時，則工人逐月實際收入必因之降低，如果增加工作，則逐月實際收入必因之提高。但是這種變動，如果發生在規模較小和人數較少的廠家，那麼影響逐月實際收入變動的程便不十分顯著了。這是從廠方說的。若從勞方說，其情形也復如是。某一個月內如果不做滿規定工作日數的工人太多，這一個月的實際收入，即有降低的可能，尤其是計件工人，因為出件數參差不一，對於逐月實際收入的變動，格外要發生重大的關係。十八年二月適當廢歷年尾年初之際（十八年二月一日即戊辰年十二月二十二日，二月二十八日即己巳年正月十九日），各業工廠工作日數都不能滿足，工人工資之論月計算者，無大影響，計時計件工人之工資，既然或以日計或以件計，所以更要受很大的影響了。二月份實際收入特低的廠家，鋸木業中之蘭格木行，祇做十八天工作，他廠亦不足月，機器業各廠均不滿二十天工作，電機業大廠如愛迪生、益中等，只做二十天，其餘各廠均未正式開工，造船業瑞塔造船廠開工二十天，祥生造船廠亦不足月，火柴業中華火柴廠開工二十天，利民開工十四天，榮昌一二廠祇各做十二天，繅絲業停工廠家有十餘家，開工的廠家，均不足月，絲織業只有極少數廠家開工，然至多不過一星期，棉織業各廠工作日數，均不滿足，針織業祇工足襪廠做足三十天，最大的廠家如中華第一針織廠等停工有半月之久，毛織業各廠開工均不整齊，製革製蛋業亦然，煙草業中之華成煙草廠雖因營業特別發達增加升工，但女工只做十四天，故女工實際收入很低。又二月份翻砂、電氣、自來水、皂燭、榨油、造紙等業廠家實際收入亦較低，也是因為工作日數較少的原因。又十八年一月，廢歷十一月佔十天十二月佔二十一天（十八年一月一日即戊辰年十一月二十一日，一月三十一日即十二月二十一日），工人因為廢歷年關將近，工作努力，間輟較少，所以一月份各業實際收入數，即使不列入年獎或分紅，也要稍稍提高的。一月份鋸木業和繅絲業的實際收入較高，原因相同。

三、季節變化 季節變化，係指氣候及工作忙閒而言。十八年六、七、八諸月，適當天氣炎熱之際，工人工作，時有間輟，計時工作日數，固然不足，計件工作的出數，也要減少，所以十八年七八兩月各業工人實際收入，除掉其他原因外，大都有稍稍降低

的趨勢。但是就變態的程度論，則七八兩月尚不及一二及十二月之甚，這是很可注意的。

現在再根據個別觀察各業逐月實際收入的變動現象，把原因推究出來。逐月實際收入變動很顯著的，是造船、火柴、絲織、針織、冷飲食品、以及煙草等業。其中造船、絲織、針織、煙草等業。工作論件給值，每月工人所得工資，均不相同，所以變動現象，也極顯著。火柴業天雨天晴工作，差異很多，大概規模宏大的廠，在天晴的時候，每日可出火柴約九十箱，天陰的時候，每日只出火柴五六十箱，出貨愈多，工人收入愈高，所以火柴業逐月實際收入，必有變動。冷飲食品業每當夏季，銷路最旺，但是製造工作，並不以夏季為最忙，所以該業逐月實際收入，也不以夏季為最高，這又是一個很可以注意的地方。各業逐月實際收入變動甚微者，有翻砂、機器、水泥磚瓦、電氣、自來水、繅絲、麵粉、榨油、漂染等業。這許多廠家，大概實行論月或計時工資制度者多，除非遇到發給年底獎金分紅原料缺乏等等特別事故，牠們工資，是不大有顯著的變動的。

我們在上面曾經說過，所謂變態和常態月份，只從大體上觀察，若詳為分析，當然能夠發現種種例外。現在再把這幾個例外的原因說一說。三月份工人實際收入特高者，造船業因江南造船廠發給分紅，針織業因中華第一針織廠等營業發達，延長工作時間，四月份化粧品業因永和實業社增加工人薪金，工人收入俱高，六月份印刷業因商務印書館發給分紅，實際收入特高，水泥磚瓦業因泰山磚瓦公司罷工十一天，實際收入特低，七月份搪瓷業鑄豐搪瓷廠罷工多日，實際收入特低。

總而言之，不論從那一方面觀察十八年本市各業工廠工人逐月實際收入變動的情形，其原因當以(1)獎金分紅，(2)工作日數，(3)季節變化三者為最重要，除了這三者以外，尚有其他足以引起逐月實際收入變動的種種原因，茲依次論列於後。

**其他原因** 一、罷工 工廠內當工人舉行罷工的時候，工作既然停頓，工資隨即停發，但是有許多案件仍舊照發或酌給，所以這裏有一個很顯著的區別，就是罷工期內工人工資如不發給或酌給則平均收入數必要降低，如果照發，則不生影響了。

二、男女童工工人的成分的變動關係 廠家因為某種原因或許減少童工而添雇男工，或許減少女工而添雇童工，某月份內如果遇到這種情形，則實際收入數或致發

生變動，但是我們已經把男女童工工人的逐月實際收入分開調查和編製，所以尚不成問題。

三、有技能工人與無技能工人人數的變動關係 某一個月內如果有技能工人的人數增加或減少，或者無技能的工人的人數增加或減少，均足以影響實際收入數。我們對於工人的技能的標準，覺得很不容易確定，調查的時候，既無所依據，編製的時候，也無從考究。這是我們對於十八年各業工廠工人逐月實際收入數尚覺不能滿意的地方。但是我們新近添辦的工資率統計，不但分業調查，並且又將職務分開，工人技能的高下，從職務方面，便能看得清楚。讀者對於工人技能和工資的關係，果有研究興趣，請參閱工資率統計何如。





| 工<br>業  | 月<br>份 | 一 | 二        | 三        | 四        | 五        | 六        | 七        | 八        | 九        | 十        | 十一       | 十二       | 各<br>月<br>平<br>均 |          |
|---------|--------|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------------|----------|
|         |        | 月 | 月        | 月        | 月        | 月        | 月        | 月        | 月        | 月        | 月        | 月        | 月        |                  |          |
| 6. 動力工業 | 電氣業    | 男 | \$ 25.97 | \$ 25.04 | \$ 26.04 | \$ 25.07 | \$ 25.69 | \$ 25.84 | \$ 25.99 | \$ 25.91 | \$ 26.87 | \$ 26.16 | \$ 25.81 | \$ 33.77         | \$ 25.89 |
|         | 業      | 女 |          |          |          |          |          |          |          |          |          |          |          |                  |          |
| 7. 化學   | 自來水業   | 男 | 54.34    | 24.32    | 24.46    | 24.47    | 24.52    | 24.54    | 24.57    | 24.51    | 24.58    | 24.63    | 24.96    | 35.48            | 27.97    |
|         | 業      | 女 |          |          |          |          |          |          |          |          |          |          |          |                  |          |
| 學       | 皂燭業    | 男 | 20.70    | 15.30    | 18.71    | 18.36    | 19.70    | 17.07    | 16.57    | 17.90    | 18.83    | 19.35    | 20.78    | 21.03            | 18.72    |
|         | 業      | 女 | 8.94     | 6.00     | 10.52    | 10.21    | 10.33    | 8.87     | 7.42     | 8.10     | 8.94     | 9.53     | 9.20     | 10.75            | 8.75     |
| 工       | 油漆業    | 男 | 28.22    | 18.50    | 18.86    | 18.46    | 22.39    | 18.25    | 16.39    | 17.37    | 17.06    | 17.38    | 16.98    | 14.12            | 18.37    |
|         | 業      | 女 | 10.79    | 10.25    | 11.94    | 15.00    | 12.00    | 9.99     | 10.17    | 10.14    | 10.36    | 10.56    | 10.19    | 10.25            | 11.51    |
| 業       | 火柴業    | 男 | 30.57    | 11.70    | 20.87    | 20.89    | 23.50    | 20.64    | 20.28    | 19.32    | 22.00    | 21.87    | 22.13    | 21.17            | 21.89    |
|         | 業      | 女 | 5.02     | 4.28     | 5.09     | 5.32     | 6.92     | 5.45     | 5.33     | 5.02     | 6.14     | 6.17     | 6.60     | 5.46             | 5.51     |
| 目       | 搪瓷業    | 男 | 21.55    | 17.04    | 17.06    | 17.55    | 18.30    | 17.90    | 14.69    | 16.42    | 18.61    | 19.22    | 19.24    | 19.13            | 18.03    |
|         | 業      | 女 | 8.00     | 6.84     | 8.02     | 7.83     | 7.46     | 7.52     | 4.65     | 9.15     | 10.85    | 9.35     | 9.83     | 9.87             | 8.31     |
| 目       | 化粧品業   | 男 | 19.00    | 19.23    | 19.38    | 22.82    | 20.27    | 20.00    | 19.85    | 17.14    | 18.67    | 18.85    | 18.01    | 18.34            | 19.65    |
|         | 業      | 女 | 7.67     | 5.10     | 13.19    | 10.33    | 6.89     | 4.88     | 9.14     | 7.66     | 10.25    | 10.49    | 8.41     | 9.20             | 8.76     |



工資和工作時間

| 工<br>業  | 月<br>份                | 月              |          |          |          |          |          |          |          |          |          |             |             | 各<br>月<br>平<br>均 |          |
|---------|-----------------------|----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------------|-------------|------------------|----------|
|         |                       | 一<br>月         | 二<br>月   | 三<br>月   | 四<br>月   | 五<br>月   | 六<br>月   | 七<br>月   | 八<br>月   | 九<br>月   | 十<br>月   | 十<br>一<br>月 | 十<br>二<br>月 |                  |          |
| 9. 皮革品目 | 製<br>革<br>業           | 男 <sup>註</sup> | \$ 20.73 | \$ 16.46 | \$ 19.48 | \$ 19.60 | \$ 19.85 | \$ 18.79 | \$ 22.23 | \$ 20.88 | \$ 21.23 | \$ 22.15    | \$ 22.29    | \$ 21.68         | \$ 20.39 |
|         |                       | 女              | 13.82    | 14.10    | 9.55     | 12.94    | 11.53    | 13.05    | 11.90    | 10.32    | 13.32    | 12.96       | 14.30       | 13.44            | 12.32    |
|         |                       | 童              | 7.49     | 11.05    | 8.36     | 9.53     | 8.46     | 6.67     | 6.44     | 6.44     | 6.63     | 7.02        | 7.54        | 7.28             | 8.41     |
| 10. 飲品  | 麵<br>粉<br>業           | 男 <sup>註</sup> | 18.62    | 17.42    | 17.87    | 17.90    | 17.81    | 17.91    | 17.86    | 16.35    | 17.49    | 17.37       | 17.39       | 17.47            | 17.61    |
|         |                       | 女              |          |          |          |          |          |          |          |          |          |             |             |                  |          |
|         |                       | 童              |          |          |          |          |          |          |          |          |          |             |             |                  |          |
| 食       | 榨<br>油<br>業           | 男 <sup>註</sup> | 18.56    | 16.16    | 17.09    | 17.54    | 17.25    | 17.45    | 17.94    | 17.13    | 16.57    | 17.33       | 16.67       | 17.10            | 17.28    |
|         |                       | 女              |          |          |          |          |          |          |          |          |          |             |             |                  |          |
|         |                       | 童              |          |          |          |          |          |          |          |          |          |             |             |                  |          |
| 品       | 製<br>蛋<br>業           | 男 <sup>註</sup> | 22.58    | 15.40    | 18.81    | 18.85    | 21.56    | 21.06    | 22.79    | 21.09    | 21.60    | 23.45       | 21.89       | 22.85            | 20.89    |
|         |                       | 女              | 4.43     | 2.31     | 10.82    | 12.50    | 14.23    | 14.41    | 13.17    | 11.07    | 10.72    | 13.65       | 12.23       | 13.16            | 11.65    |
|         |                       | 童              |          |          |          |          |          |          |          |          |          |             |             |                  |          |
| 目       | 調<br>味<br>罐<br>頭<br>業 | 男 <sup>註</sup> | 24.72    | 21.80    | 20.02    | 22.34    | 23.11    | 22.43    | 23.83    | 31.33    | 25.62    | 24.66       | 26.38       | 41.69            | 25.81    |
|         |                       | 女              | 13.37    | 7.30     | 8.97     | 8.26     | 8.26     | 7.79     | 7.53     | 15.26    | 14.01    | 10.31       | 12.91       | 14.53            | 11.05    |
|         |                       | 童              |          |          |          |          |          |          |          |          |          |             |             |                  |          |
| 目       | 冷<br>飲<br>食<br>品<br>業 | 男 <sup>註</sup> | 22.04    | 20.09    | 18.88    | 19.30    | 17.26    | 17.82    | 17.95    | 15.14    | 19.72    | 18.72       | 16.51       | 32.53            | 18.94    |
|         |                       | 女              |          |          |          |          |          |          |          |          |          |             |             |                  |          |
|         |                       | 童              |          |          |          |          |          |          |          |          |          |             |             |                  |          |
| 目       | 煙<br>草<br>業           | 男              | 30.05    | 24.21    | 20.51    | 26.73    | 21.17    | 22.11    | 24.51    | 23.62    | 21.44    | 23.78       | 23.21       | 24.80            | 23.86    |
|         |                       | 女 <sup>註</sup> | 12.91    | 8.08     | 12.97    | 13.69    | 9.78     | 10.35    | 12.64    | 13.84    | 15.47    | 15.52       | 15.18       | 14.70            | 12.32    |
|         |                       | 童              | 12.19    | 8.41     | 10.19    | 5.74     | 6.37     | 6.35     | 12.73    | 9.69     | 9.69     | 5.46        | 9.44        | 8.17             | 9.38     |

| 工<br>業             | 月<br>份 | 工人類別            |          |          |          |          |          |          |          |          |          |             |             | 各<br>月<br>平<br>均 |          |
|--------------------|--------|-----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------------|-------------|------------------|----------|
|                    |        | 一<br>月          | 二<br>月   | 三<br>月   | 四<br>月   | 五<br>月   | 六<br>月   | 七<br>月   | 八<br>月   | 九<br>月   | 十<br>月   | 十<br>一<br>月 | 十<br>二<br>月 |                  |          |
| 11.<br>造<br>紙<br>業 | 造<br>紙 | 男 <sup>註一</sup> | \$ 26.68 | \$ 18.42 | \$ 20.70 | \$ 19.80 | \$ 21.04 | \$ 20.24 | \$ 20.79 | \$ 18.79 | \$ 19.59 | \$ 18.95    | \$ 21.12    | \$ 21.26         | \$ 20.60 |
|                    |        | 女               | 5.49     | 5.05     | 9.70     | 8.64     | 9.80     | 9.72     | 10.23    | 9.42     | 10.03    | 9.42        | 9.45        | 9.37             | 8.72     |
|                    | 業<br>童 | 8.95            | 10.06    | 9.76     | 8.86     | 7.17     | 9.87     | 9.39     | 9.44     | 9.91     | 11.18    | 8.62        | 8.93        | 9.46             |          |
| 印<br>刷<br>目<br>業   | 印<br>刷 | 男 <sup>註二</sup> | 42.12    | 42.41    | 45.03    | 48.86    | 47.80    | 73.63    | 37.93    | 38.04    | 40.89    | 46.11       | 37.44       | 72.85            | 47.50    |
|                    |        | 女               | 27.90    | 28.01    | 35.56    | 35.56    | 39.11    | 40.56    | 22.38    | 21.21    | 24.04    | 36.94       | 29.50       | 37.38            | 31.24    |
|                    | 業<br>童 |                 |          |          |          |          |          |          |          |          |          |             |             |                  |          |

註一 主要工人。

註二 電機業僅克來勝電池廠有童工，本年二月份及十二月份童工未開工。

註三 皂燭業童工只中國肥皂公司一家有之，本年停止雇用。

註四 絲織業本年起童工工資增加，列為工人。二月份女工未開工。

## 怎樣去研究勞動問題?

## 怎樣去解決勞動問題?

研究勞動問題和解決勞動問題，必先當搜集材料，作為事實的根據，上海市社會局舉辦的各項勞工統計，依照年度，編製整個的有系統的報告，舉凡材料的來源，編製的方法，專家的意見，所得的結果，源源本本，據實刊入，文字圖表，中英並載，分析編製，極為精審，十七年度材料已出版者有下列三種：

- 上海特別市罷工統計報告
- 上海特別市勞資糾紛統計報告
- 上海特別市工資指數之試編

上列各書，每冊一元二角，由上海福州路九十九號大東書局發行。

十八年度材料出版者有下列三種：

- |              |     |        |
|--------------|-----|--------|
| 上海特別市罷工停業統計  | 已出版 | 定價三元五角 |
| 上海特別市勞資糾紛統計  | 已出版 | 定價五元   |
| 上海特別市工資和工作時間 |     |        |

十九年度材料擬出版者有下列五種：

- |            |        |
|------------|--------|
| 上海市工人生活費指數 | (在印刷中) |
| 上海市工人生活程度  | (在編輯中) |
| 上海市罷工停業統計  | (在印刷中) |
| 上海市勞資糾紛統計  | (在編輯中) |
| 上海市工資和工作時間 | (在輯編中) |

除上列統計刊物外，該局更從事編譯勞工統計叢書，期以勞工統計的編製方法介紹國人。書目如下：

- |           |      |       |
|-----------|------|-------|
| 生活費指數編製法  | 已出版  | 定價四角  |
| 失業統計編製法   | 已出版  | 定價三角半 |
| 勞動協約統計法   | 已出版  | 定價三角  |
| 工人意外遭遇統計法 | 已出版  | 定價五角  |
| 美國住宅問題概觀  | 在印刷中 |       |
| 家庭生計調查法   | 在印刷中 |       |

上列各書，均由上海商務印書館發行。

# WAGES AND HOURS OF LABOR

GREATER SHANGHAI

1929

COMPILED BY  
BUREAU OF SOCIAL AFFAIRS  
THE CITY GOVERNMENT OF GREATER SHANGHAI

## FOREWORD

No apology is necessary for the investigation and publication of data concerning industrial and labor problems in China, and especially in Shanghai. The need of industrial development for the country is a fact readily admitted by all. It is equally plain except to the communistically minded that whatever infant industries there are should not be smothered by unreasonable demands on the part of labor. Nor are the conditions of the working class less serious or of less importance to the earnest students of social problems in China. Their number, their poverty, their ignorance, and their suffering demand deep sympathy and wisdom from those in positions of responsibility. Both labor and capital are necessary to the prosperity of the country, and both claim certain rights and considerations from the authorities and the public. How to be fair to both parties and to bring about their successful coöperation is one of the most urgent yet embarrassing questions of the day.

But a student of social and economic problems should not be a philanthropist, nor should his attitude be that of a compromising well-wisher to the opposing parties. His work is that of a scientist. He is to collect data, to observe, to record, and to give the results of his unbiased investigations to the public. The success of human control hitherto achieved in the realm of nature is hardly equal to the complexity and magnitude of the problems of social control dreamt of by the world reformers. And as control over nature depends categorically upon the mathematical and experimental method, so plans for social betterment are mere talk unless based upon investigations of facts, observed and recorded in an unbiased and systematic manner.

Shanghai, one of the largest cities of the world today, is important not only as a great commercial and industrial center. It is a meeting place of the East and the West, a link between the old and the new. Conflicting interests, usages, manners, and view-points exist among its residents. There are conservatives and radicals, financial magnates and extreme communists. These are the people who represent movements and tendencies which are beyond our power to subdue, tendencies which we may perhaps at best guide and direct into safer, less explosive channels.

In view of the size and the complicating factors in the industrial problems of Shanghai, we shall congratulate ourselves if we make no grave mistakes in this pioneer attempt at labor statistics. We need not repeat here the history of our work. Very briefly, it began three years ago with the organization of the Department of Agriculture, Labor, and Commerce, which was lately reorganized into

the present Bureau of Social Affairs. In the course of the last three years, we have arrived at a plan and project for our work. This project includes in its scope a general survey of labor conditions in Greater Shanghai and investigations into unemployment, wages and hours of labor, the standard of living, retail prices, labor unions, strikes and lockouts, arbitration and conciliation, collective agreements, industrial accidents, labor welfare work, etc.

The success of the work in the future will depend upon two factors; namely, the amount of funds available and the securing of trained and capable men for the work. A third condition of success is the encouragement given by the public and the interest and zeal shown by the members of our staff. In this last item we must confess we have been most fortunate in having the constant advice and encouragement from well known authorities on the subject both at home and abroad, especially from Dr. Franklin Ho, Director of the Nankai University Committee on Social and Economic Research; Dr. Ta Chen, Professor of Tsinghua University; Mr. D. K. Lieu, Director of the Bureau of Statistics, Legislative Yuan; Mr. K. P. King, Commissioner, Bureau of Finance, Nanking; Mr. Ethelbert Stewart, Commissioner, Bureau of Statistics, U. S. Department of Labor; and Mr. A. Thomas, Director, International Labor Office, Geneva. Our deepest gratitude is due to Dr. C. F. Remer, Professor of Economics, University of Michigan, and Director of a study of the International Economic Relations of China; Mr. P. B. Sullivan, Professor of Economics, St. John's University; Mr. D. Roberts, Professor of Political Science, St. John's University; Mr. L. K. Tao, Director of Social Research Department, China Foundation for the Promotion of Education and Culture, Peiping; Dr. Franklin Ho; Dr. Ta Chen; and Mr. K. P. King; who have, in spite of their multifarious duties, rendered most valuable service in reading over the manuscript and in suggesting alterations and improvements for this publication. Lastly, mention must be made of the managements of all those establishments who have most cordially supplied the Bureau with the required data; of Messrs. Luther C. T. Mao, C. H. Fei, and D. L. Ting for their assistance in the various stages in conducting this investigation; of other members of the staff, who took great pains in gathering the primary data for the present study; and of all those who have helped to make our work possible.

T. Y. TSHA



## PREFACE

China has begun the task of adjusting herself to modern industry. This statement is too brief and too simple to bring home the whole truth. The adjustment means a profound change in the economic life of the Chinese people, and not in the economic life only, but in the political and social life as well. China is being drawn slowly into the current of the modern economic world.

There are those who drop easily into sentimentality upon the contemplation of this fact. They praise the good old days of what may be called traditional China. The culture, the manners, the social arrangements and the point of view of an earlier China seem to them precious—more desirable than the cheapness and mechanization which they see in modern industry. It is rather surprising how many who are not Chinese fall into this way of talking. I have found my Chinese friends less likely to do so.

Others talk with an easy enthusiasm of the modernization of China. Up-to-dateness seems to them to carry its own justification, modern industry to offer such obvious advantages as to be almost an unmixed blessing. If they are assailed by doubts, they are likely to take refuge in a conviction that China may well avoid the evils that may lurk in the machine by observing the industrialized nations of the West and avoiding the mistakes of an older industrialism.

It is not my purpose, at present, to enter upon this debate over the desirability of China's industrialization. It involves too many factors to be dealt with briefly, and, in the last analysis, it rests upon the values which different individuals and groups place first. In this field of values debates are usually endless. My own method in this difficult field is to set up an objective standard which seems to me consistent with the subjective values to which I give importance. For China I offer as such an objective measure, the standard of living of the great mass of the people. Anything which makes for a general higher standard of living seems to me desirable, anything which increases China's poverty undesirable. If I am asked whether a higher standard of living makes for the good life, I must reply that I cannot be sure, but that I see no inconsistency.

The assumption that the problems of industrialization have been solved in the West and that the mistakes of the West may be avoided in China deserves some attention. The western world has faced a depression in agriculture for a considerable number of years. The depression has now become general. No one who knows the facts about Europe and America can be so sure that we, in the West, have mastered the division of labor and the money economy which go with modern industry. We must admit that the control of modern industry requires

more profound study and more patient investigation than some of us have supposed. We cannot be quite sure what the machine is doing to us. While we believe in machine industry we cannot recommend it to China without some qualification if we are entirely frank.

And then let me turn to the assumption that China may avoid the mistakes of the West. There are some things that are obvious. Twelve hours of labor a day for a young growing child is indefensible. A well ventilated and well lighted factory is to be preferred to one which is dark and stifling. Protection from moving machinery is a plain necessity. But there are trends and tendencies which are by no means so easy to judge. It may well be that China will have to discover her own mistakes and do her own best to rectify them.

In any case there is no way forward without patient study. The experience of others and the reading of history are important but they are no substitute for intelligent observation of China's industrial population or for careful study of the trends in her own industrial life.

The report on wages and hours of labor in Shanghai which is to be found in the following pages is a real attempt to study the problems presented by modern industry. It is an effort to find the facts and to set them forth. At the end of a hundred years Shanghai will still be looking for the facts, but this does not make the present study less significant. Policy must be formulated upon the facts which are now available. It cannot wait upon tomorrow's statistical tables.

This study shows the largest single group of industrial workers in Shanghai to be the women working in cotton spinning. During the year 1929 they worked about twelve hours a day at a wage rate of about 45 cents. The average monthly earnings of these women was about \$12.50 This is in a way a modal figure for industrial workers in Shanghai.

The largest group of men were workers in cotton spinning. They worked about twelve hours a day and their average monthly earnings were \$15.28.

These few facts provide a point of reference and comparison for the study of industrial conditions in Shanghai.

Sixty-seven per cent, we are told, of the total number of laborers in Shanghai receive a wage of less than 10 cents in Chinese currency an hour.

An early labor leader in the United States made popular the following slogan :

Eight hours for work  
Eight hours for play  
Eight hours for sleep  
And a dollar a day.

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This represents a state of things well in the future for the industrial workers of Shanghai, even when it is understood that for present purposes the dollar is a silver dollar.

It is to be hoped that the advance in labor statistics which this publication marks will be followed by other forward movements. There are difficulties of a theoretical and practical sort behind this report which only those appreciate who have tried a task of this kind. The study needs to be considered in its relation to recent reports on the cost of living. It needs to be supplemented by other studies and especially by detailed studies of particular industries and particular localities. Facts do not, of course, make policies, but without the facts the fairest policy withers and dies.

With these few words I commend to students the following pages on wages and hours of labor in Shanghai today.

C. F. REMER.

SHANGHAI, OCTOBER, 1930.

## PREFACE

I have read with great interest the manuscript of this valued volume on wages and hours of labor in Shanghai prepared by Prof. T. Y. Tsha of the Bureau of Social Affairs of the City Government of Greater Shanghai. As one who for several years has attempted to offer courses in Social Problems in China, and who has felt the lack of statistical facts with which to illustrate the problems, I appreciate very much the growing volume of increasingly reliable statistics which is forthcoming from various government bureaus and privately subsidized foundations and institutes. We were, in the past, faced with the necessity of stating relative to most problems, "there are no figures for China." Happily this apology is now becoming less true for several problems. We do have a small but ever enlarging body of facts and figures for social and economic situations which are based upon modern statistical methods.

China is, to be trite, a large place including all sorts and varieties of conditions, and there will be a danger of taking facts such as these, which have been gathered for one locality, and using them for conditions representative of "China." Necessarily, with limited funds and trained men the whole of this great land cannot be surveyed at once. Piece by piece, study by study, we shall build up a more complete knowledge of just what the facts are for the nation as a whole. This study makes a worthy contribution to this end.

This particular investigation is valuable because the subject of hours of work has a direct relationship to industrial fatigue, and fatigue has a causative connection with occupational disease and industrial accidents. Unfortunately, this study does not include many workers who labor excessively long hours in the small scale industries and handicraft establishments which employ less than thirty workers. These laborers are no doubt numerous in Shanghai and doubtless will be made the subject of a later study.

Furthermore, this report is valuable because it shows us the rates of wages and actual earnings in the major large scale industries. Wages or workers' remuneration is a subject which involves the very heart of what is perhaps the major issue of conflict between capital and labor, — the dispute over the relative proportions of the product of the enterprise that shall be awarded to the owners and stockholders as profit and dividends, and to the workers as wages. This volume throws a strong light upon the actual conditions obtaining in many establishments. Using these figures we can ascertain, in connection with standard-of-living studies, whether or not a man can earn enough to support his natural dependents, his wife and a few children, or whether his earnings are so low that his wife or children or both must also work in order to meet the needed expenses of the family.

This study is alike valuable to employer and to worker for it will show each facts concerning conditions obtaining in other industries and establishments than that with which he is connected. It is of value to the student of social conditions in furnishing authoritative data for generalizations, and also valuable to governmental legislators in providing a basis for future wage-and-hour legislation.

The low scale of remuneration shown by this study brings to our minds the "law of supply and demand" and points to the fact that were the laborers fewer in number, their wages would be higher. From the generalizations of this study one gains the impression that skill is the chief reason for varying wage rates between industries. While this is true in a large measure, we should not overlook the other fact that, were the demand for laborers much greater, or the supply much smaller, labor generally would be in a much stronger bargaining position with the employers. One reason why wages in China are so low is that employers know that there are plenty of persons wanting jobs, that the labor surplus is great and that he can pay low rates and still attract labor from the farms where it is being pushed off by pressure of population upon the land. Population pressure, in other words, has a direct relation to low wages. While we shall expect industrial expansion in China, we can hardly hope that it will expand fast enough to make the demand for workers exceed the supply. It has not done so in other countries better situated for rapid industrial expansion than in China. The labor movement in China should espouse the cause of family limitation as a means of bettering its position, as well as pushing collective bargaining. It should encourage schools for training of skilled workers in order to aid in thinning the ranks of the unskilled thus bettering their economic position.

This study is heartily recommended to all who have the interests of the people's livelihood at heart. It is very encouraging and is a sign of real progress when the program of party propaganda can be supplemented, and perhaps corrected, by a program of impartial examination of the actual facts and the publishing of scientific studies based on modern methods of fact-finding and fact-telling.

H. D. LAMSON.

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# WAGES AND HOURS OF LABOR GREATER SHANGHAI 1929

## PART I

### Introductory Discussions on Statistics of Wages and Hours of Labor

#### CHAPTER I

##### TYPES OF WAGES STATISTICS

**Wages, the  
centre of  
contention**

The problem of wages has often been the centre of contention between employers and laborers. To the employers, wages constitute an essential part of the cost of production. To the laborers, wages form the principal means of subsistence. To the employers, wages are, in part, determinative of failure or success in business. To the laborers, wages are of main concern in keeping body and soul together. So much does the problem of wages mean to the employers and laborers that each party attempts to hold fast to its own stronghold and at the same time to weaken the defences of the other. The employers try to keep the wage level down so as to reduce the cost of production. The laborers try to force the wage level up with the aim of improving their standard of living. However, there is a level of wage above which the employers will not pay, and a level below which the laborers will not accept. Between these two margins, a tug of war is constantly carried on between the two parties. The warfare seems perpetual. Neither party seems to be decisively victorious. Nor is either party completely subdued. The wage level tends to swing to one side at one time, and come back to the other side at another. No real equilibrium can be maintained. No understanding can be established between the parties in conflict. Industrial disputes have often been the immediate outcome of such conflicting interest, and economic losses the ultimate effect. A solution to this embarrassing problem has been sought. But no satisfactory solution can be effected without an enquiry into the intricacy of the wage conditions. Wage statistics are therefore resorted to as a supplier of necessary information.

**Purposes  
of wage  
statistics**

Wage statistics, however, are not a solution in themselves. They are but means to an end. Wage statistics are collected for three main purposes, namely, to provide information regarding (1) the cost of labor as part of the cost of production, (2) the standard of living of laborers, and (3) the distribution of the national dividend. Employers are anxious to know what part the cost of labor plays in the field of production. They hope to adjust the wage level in such a way so as to secure the greatest efficiency and to insure highest profits. Information regarding wages is therefore of considerable value to them. Not only labor but society as a whole, is perhaps interested in the standard of living of the laborers. What are the laborers getting for what they contribute to production? What kind of living can they afford with their remuneration? How does the standard of living of laborers in one place compare with that in other places? Dozens of similar questions are of general interest. Wage statistics answer them in terms of dollars and cents, or of index numbers. In the distribution of the national dividend among the different factors of production, wages constitute an important element. For the purpose of estimating the total wage bill of a country in order to compare the amount with the total national dividend, statistics of total earnings and number of workers are most valuable.

**Statistics of  
wage rates  
and earnings**

Wage statistics of different types are compiled to answer different purposes.<sup>1</sup> In general, two types of wage data are collected, namely: (1) the wage rate, and (2) earnings. The wage rate is the wage received by a laborer each month, week, or day, in his specific work in a particular industry. Earnings are the regular wages plus, if any, rice allowance, allowance for board and lodging, reward, or bonus, deducting for absences and for work rejected upon inspection. In other words, wage rates are the agreed terms of pay under which the laborers work, while earnings represent the actual income of workers in a specific period of time.

The compilation of various types of wage data will depend largely on the object in view. If the object is to estimate the cost of labor as an important factor in the budget of the production cost, wage rates are most useful. Wage rates are the result of agreements between the employers and laborers. They are generally known before the work is undertaken, and remain fixed or are varied in known manner while the agreement is in operation. In considering the wages in relation to the standard of living of the laborers, actual earnings are more suitable than the rates of wages. The actual earnings of the laborers may be considerably

<sup>1</sup>International Labor Office: *Methods of Statistics of Wages and Hour of Labor*, pp. 7, 11, & 12.

higher than the rates of wages due to extra payments. Wage rates tend to underestimate the actual income of laborers. The true standard of living of laborers, therefore, can be better represented by the actual earnings.

**Time rate and piece rate wages**      A further distinction is made between time rate and piece rate wages.<sup>1</sup> Time rate is a rate for a given unit of time, and piece rate is that for a given unit of output. With time rate of wages generally all the laborers on the same rate will earn the same amount. Where piecework rates operate, earnings for a given period tend to vary from worker to worker. When labor is paid time wage, there is a distinction between rates and earnings, inasmuch as the latter may include allowances, bonus, etc., while the former exclude any such extra payments. When the labor is paid by the piece, significance of the rates of pay is lost except to those thoroughly familiar with the technical processes which may be involved. In case of payments of this nature the calculation of earnings is an indispensable requisite for any study of the remuneration of labor.

**Difficulties in gathering data**      So far as the gathering of data is concerned, both types of wage data present difficulties of their own. Relatively speaking, the time rates of wages present fewer difficulties in both collection and compilation of data. Piece rates, however, give rise to serious obstacles. Piece rates do not readily lend themselves to comparison with time rates. Nor do they always lend themselves readily to comparison with similar rates in a different period. Only when they are reduced to payments for a given period of time can such rates be effectively used in comparison of payments for labor. The processes of computation are thus much complicated. Not only records of the laborers' output, but also the length of time worked in producing the output, should be kept. In the case of earnings, no such complication is involved. However, the processes of computation are not very much simplified. Earnings comprise, besides wages, extra payments which are given irregularly in different establishments, at different periods, and to different classes of laborers. Earnings therefore have a broader scope and are of a more heterogeneous nature than wage rates. Such heterogeneity demands, careful handling of the material and elaborate compilation. All these difficulties must be well taken care of. A later chapter deals at length with the processes of compilation.

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<sup>1</sup> Ibid, pp. 8, 9, & 11.

Variations  
in wage  
rates and  
earnings

With respect to variations in the wage level, actual earnings are often much more sensitive to changes than are daily, weekly, or monthly rates of wages.<sup>1</sup> Wage rates are the result of agreements, individual and collective, between employers and workers. They can be changed only after a process of bargaining. Actual earnings, on the other hand, can be diminished or increased immediately by a distribution of bonus or allowance, a change in the length of period worked, or similar causes subsequent to seasonal changes in the industries. A more detailed discussion of the variations in actual earnings will be left to Part III of the publication.

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<sup>1</sup>Ibid, pp. 10 & 11.

National Industrial Conference Board: *Wages in the United States, 1914-1927*, Chap. 1.

National Industrial Conference Board: *Wages in the United States, 1928*, Introduction.

## CHAPTER 2

### METHOD OF COLLECTING WAGE DATA

#### Practical difficulties with wage statistics

In view of the necessity of having information regarding wages, the Bureau of Social Affairs has decided to take up the task of compiling statistics of wage rates and actual earnings. The first two or three months were spent in preparing ourselves for the task we were going to take up. The theoretical and mathematical, as well as the practical aspects of wage statistics were carefully studied. The difficulties with each type of statistics were detected. We found that in the case of wage rates, the most serious obstacle is the piece rates of wages. In view of the conditions in most of the manufacturing establishments in this city, where no accurate and reliable records of the units of output and of the units of time worked per worker per day are kept, it is practicably impossible to know definitely the piece rates of wages. Several instances may be mentioned. In the silk weaving industry, wages are paid according to the finished products turned in. The time required to finish a piece of satin is not definitely regulated. No well-kept records exist as to how much the individual laborers have accomplished per day. In the tobacco industry, workers in the packing department can work a longer or a shorter period as they please. In the match industry, wages are paid according to the cards distributed to the laborers. Two or more workers may work jointly for one card. There is not even an idea as to the exact number of laborers, to say nothing of the wage rate of each individual laborer. Such difficulties can only be overcome with the assistance of the managements. Records of the wages and hours of work must be kept especially for our purpose. It seemed that no managers were willing to bother themselves with that. These facts account for the failure of our attempt at wage rate statistics when our work started. In the case of actual earnings, information regarding the number of male, female, and child workers, and their wages, rewards, etc., were not too difficult for the managements to supply. The result of our investigation into the actual earnings of factory workers in 1928 has appeared in the "Index Numbers of Earnings of Factory Laborers in Shanghai." This study in earnings was continued in 1929. The same method as that used in 1928 was employed, and the result will appear in the last part of this publication. In September 1929, we succeeded in gathering data for wage rates statistics. As a result of frequent contacts and persistent efforts, those in control were then willing to cooperate better with the Bureau. Most establishments have been willing to supply detailed information and help to

convert the piece rates of wages to a time basis. Therefore, the statistics of wage rates and earnings form the two branches of wage statistics simultaneously carried on by the Bureau.

**Scope of investigation:** The scope of investigation is threefold: viz., the area covered, the types of laborers investigated, and the industries and establishments included. Greater Shanghai comprises 30 districts of which 17 were formally taken over by the City Government in July, 1928.<sup>1</sup> Thus on the east side of the Whangpoo River there are the following six districts: Lu Hang, Yang Sze, Yang Ching, Tang Chiao, Kao Hang, and Kao Chiao; while on the west side, the following eleven: Yin Hang, Yin Siang, Cha Pei, Hu Nan, Kiang Wan, Fa Hwa, P'u Sung, Tsao Ching, Woo Sung, Peng P'u and Chen Ju. In addition to these 17 districts, there is the Special District comprising the French Concession and the International Settlement. But as our investigation is limited to a number of representative establishments in certain important industries, and such establishments are generally found in Hu Nan, Chapei, Kiang Wan, Yin Siang, Yang Ching, and the Special District, the scope of investigation is practically confined to these 6 districts.

**2. Types of laborers included** The types of laborers included in the investigation is limited to factory laborers only. The exclusion of non-factory laborers is not due to the fact that their wage conditions are of minor concern but rather to the practical difficulties. So long as a labor census is still an unrealized plan, and our knowledge of the total number of workers in the city is but a vague idea based only upon estimates, an investigation into the wage conditions of the non-factory laborers who are constantly shifting their working places is hardly practicable. Therefore, we cannot help limiting our investigation to factory laborers who have definite work places, and whose wages can be found on the pay rolls of their respective factories. However, we do not include, in factory laborers, all employees such as office staff, and technicians in a manufacturing plant. By factory laborers we mean only those laborers directly engaged in manufacturing work in a plant.

**3. Industries and establishments included** Our investigation is limited to certain representative establishments in certain important industries. One way of measuring the importance of an industry is by the number of laborers. Any industry which has under it a labor force of 1,500 laborers or more is considered important enough to be included. Out of these important industries,

<sup>1</sup>Secretariat, City Government of Greater Shanghai: Handbook of the City Government, Greater Shanghai, 1928, p. 4.



certain establishments of sufficiently large scale are chosen as representative establishments. However, a few of the industries included in our investigation are of less than 1,500 laborers. These industries are included in view of their particular conditions which demand due considerations in spite of their deficiency in the number of laborers. It should be made clear, however, that not all industries having 1,500 laborers or more are included. Often they are sacrificed due to the practical difficulty of collecting data from them.

**Collection  
of data**

In the study of earnings, our investigation covers 30 industries.

In the statistics of wage rates, however, the number of industries included is 21; 9 industries have been dropped. The omission of an industry is not without its ground. In collecting data of earnings, only the sum total of wages, rewards, bonus, etc., that is paid to the workers each month, is required. No less than 65% of the data are secured through our agents, and 35% of them through the returns filled out by the managements. In collecting the data of wage rates, the matter is much more complicated. The wage rates of individual workers, not the total wages, are required. Such information is in too much detail. It must be taken down actually from the pay rolls of these establishments. Most foreign establishments viewed this as a disclosure of business secrets. They would not let our agents gain access to their books. Some Chinese establishments also rejected this. The lack of sufficient funds and a sufficient number of agents presented another obstacle to the collection of wage-rates data. Due to all these difficulties, data were collected for 21 industries only. One of the industries dropped is the electrical machines and appliances industry. Data were secured from most of the Chinese establishments. But, owing to the failure of some leading foreign firms to supply the necessary information, we were not able to get enough instances to represent the whole industry. Another example is the electricity industry. Two of the biggest electric plants, one in the International Settlement and another in the French Concession, both are under foreign control, refused to submit to our investigation, notwithstanding our untiring effort to win them over. Still another instance is the cotton weaving industry, in which data were collected from 19 establishments only. But those foreign establishments, who have been supplying us with earning data, were unwilling to disclose their wage rates to us. Thus, these three industries, which occupy quite an important place in the Shanghai industrial world, were dropped for no other reason than a failure of some of the establishments, especially the foreign, to cooperate with us. However, it is hoped that in the course of time they will be able to understand us better and to forsake their present policies.

**Method of sampling**

In so far as our investigation does not cover the entire field of industries, a method of sampling has been adopted. The industries included must be able to form a good representation of the manufacturing activities of the city. The establishments which furnish information must be representative of the particular industry by the number of their laborers. In obtaining the sample which is to be representative of the whole, there is a choice among three methods, namely, the extensive, the random, and the representative sampling. The method of extensive sampling is defective in that there is a tendency to include materials readily available and to leave out facts difficult to collect. The principal danger with the method of random sampling is that the number of cases included may not be sufficiently large for the "random" element to come into play. The method of representative sampling, which we adopted, also has its dangers. It opens the way to biased selection on the part of the investigators, and it often results in the setting up of an unrepresentative standard. Great care, therefore, must be taken, when this method is employed in avoiding personal elements as well as in securing representativeness for the samples selected.

**Representativeness of samples**

Representativeness of the samples is what we were seeking in selecting the standard establishments. Judging from the past experience, the samples chosen, though cannot be regarded as a perfect representation, are quite satisfactory in giving a comprehensive impression of the industrial world in this city as a whole. The establishments included were not necessarily those of extraordinary size. But those plants which have a labor force of less than 30 workers were omitted in our investigation, except in a few industries where condition warrants such inclusion. In order that the establishments covered be representative of the particular industry, our principle is to investigate at least one-third of the number of laborers in a given industry wherever possible. In a number of industries the number of laborers investigated far exceeds one-third of the total number of laborers. This, we believe, would only add to the reliability of the result. Mention must be made that in a few industries the one-third ratio is not observed. We need not review the practical difficulties involved, which has rendered a more extensive investigation in these industries impossible. These industries are included with the hope that further improvement may be made to extend our investigation to above one-third of the total number of laborers. These representative establishments chosen are to be kept unchanged so long as our investigation continues. However, in an inquiry of this nature, substitutions cannot well be avoided. Some of these plants may cease operation or may be merged into other organizations, and in order to

preserve the scope of inquiry on approximately the same basis it becomes necessary to add new sources of information when the old ones drop out. In making such substitutions, great care is exercised to assure a connected and comparable series of results.

**Sources of information** Data with regard to wage rates are obtained chiefly from the employers' pay book. Among other sources of information as to rates of wages mention may be made of the following:<sup>1</sup>

- (1) Collective agreements.
- (2) The terms of settlements, following industrial disputes, regarding wages whether by conciliation or arbitration.
- (3) Labor exchange.
- (4) Sickness or accident insurance.
- (5) Labor unions' records regarding wages.
- (6) Others.

No labor exchanges and sickness or accident insurance institutions are found in this city. The statistics of collective agreements in Shanghai have not as yet been compiled. Data from the terms of settlements following industrial disputes<sup>2</sup> suffer from the defect that they are based on a comparatively small number of laborers affected by the disputes. Labor unions cannot be depended upon to afford any reliable and unbiased information. With the rapid growth of labor organizations, there has not been developed on the part of labor union officers a true interest to build up a healthy and coöperative relationship between the workers and the employers. But, indeed, they intend, with their own selfish gain in view, to establish class antagonism and to stir up troubles between the two parties. Thus the only source from which we collect data of wage rates is the employers' pay rolls. The desirability of the results depends of course much upon the way of collecting. The source in itself, however, is undoubtedly a very reliable and exhaustive one. The constant contact with the Chinese establishments gives our agents free access to their books. Data obtained this way would be in no way less accurate or less dependable than those from any other of the sources.

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<sup>1</sup>International Labor Office: *Methods of Statistics of Wages and Hours of Labor*, pp. 12, 13 and 14.

<sup>2</sup>Bureau of Social Affairs, City Government of Greater Shanghai: *Strikes and Lockouts, Greater Shanghai, 1929; Industrial Disputes, Not Including Strikes and Lockouts, Greater Shanghai, 1929.*

**Date of collection, September 25** In contrast to the data of earnings, which are collected monthly, the data of wage rates are collected only once a year. It is evident that the date of collection deserves careful consideration. It has been finally decided to conduct the investigation on September 25. This is somewhat similar to the practice of the Bureau of Labor Statistics in the United States, where data are collected by the Bureau each year as of 15 May for practically all of the general trades employed at time rates in representative cities of the United States.<sup>1</sup> We have several reasons to support the date we choose. In the first place, the months of September and October are a period of normal fluctuations in the wage movements and working conditions. Attendance of laborers is, in general, regular, and absences are fewer. The mild weather in this period accounts much for its normality. Further the absence of festival occasions in this period, particularly in the latter part of September, makes work regular. Moreover, in the collection of wage data, the period covered must be short such that no serious changes would occur. It is therefore desirable to collect data on a given day, which is a proper representation of the general conditions in a given period.

Arrangements were made with various establishments requiring them to keep special records of the wage rates of, and hours worked by, and also the output produced and time worked by, the piece workers. With these records ready, we needed only to send our agents to the establishments to take down the data required. However, it was inevitable that the records might not be ready at the specified date. Two or three days' delay would then be allowed. For instance, some departments in the match factories and soap factories have to cease operation on rainy days. It so happened that September 25, 1929, was a rainy day. Investigations in the above mentioned industries had to be postponed to a later date.

**Difficulties with piece wages** The most perplexing problem in the collection of wage data is that of the piece rates. Information regarding the basic unit of the products, the number of units of output per laborer, the rate of wages per unit of output, and the number of hours worked on the day of investigation must be secured. From this information, the piece rates are to be converted to a time basis by multiplying the number of units of output per laborer with the rate per unit of output, and dividing the product by the number of hours worked. Thus, the hourly rates of wages are obtained. Information regarding the unit of output and the rate per unit can be readily afforded by the

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<sup>1</sup>The United States Bureau of Labor Statistics: Bulletin, No. 286.

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managements. The units of output per laborer and the number of hours worked, however, have to be specially recorded for us by the staff and foremen in different departments of various establishments. This is undoubtedly a very painstaking task. We owe very much to the coöperation and assistance of the many officers, who helped us to realize our plan. Nevertheless, some of the records kept are not very satisfactory, and their accuracy is highly questionable. The result would be more reliable if we had enough agents to do the work of recording ourselves. In view of such deficiencies, we had, in the compilation of wage-rate statistics, treated the time workers and piece workers separately, such that the unreliability of the piece rate data would not affect the validity of the result as a whole.

## CHAPTER 3

### ESTIMATION OF THE TOTAL NUMBER OF FACTORY LABORERS

#### **Need of labor census**

A study of the distribution of laborers in various industries must be made prior to the compilation of wage statistics. An analysis as to how the laborers in a given district are distributed cannot be reliable without an investigation into the total number of laborers. Various questions regarding the distribution of laborers may be raised. How are the laborers distributed among the various industries? How among male, female, and child workers? How does the number of time workers compare with that of piece workers? What percentage do the factory laborers constitute of the total number of laborers and what percentage the non-factory laborers? How are the laborers distributed geographically among the different sections in the district? All these questions cannot be answered with definiteness and reliability if the laborers covered in the investigation are not representative of the entire labor force in the district. The value of wage statistics does not lie in the extensiveness of scope, but rather in the representativeness of the samples. In order that representative industries and laborers be chosen, a labor census is a prerequisite.

#### **Difficulties with a labor census**

A labor census is, however, a very elaborate and difficult job, even more so than a population census. A population census requires but to count indiscriminately the inhabitants in every family. A labor census, on the other hand, has to distinguish between laborers and non-laborers who are mixed together in the district. In a labor census, there are three fundamental requirements: First, the period for investigation should be short; labor turn-over tends to destroy the accuracy of the census. For example, wharf workers, and masons and carpenters who have neither any definite workplace nor any regular working time, are constantly shifting. Second, in order to accomplish the investigation in a short time, a large number of agents must be employed. Third, in order to meet all the expenses involved, adequate funds must be provided. The project for a labor census in Greater Shanghai has already been worked out. But, owing to the inability to raise the necessary fund, it has not yet been put into practice. In spite of all these difficulties, our study of wages has had to go on even without such a census. A method of arriving at the total number of factory laborers has therefore been resorted to temporarily to take the place of a census.

**Method of investigation**

In May, 1928, it was found as a result of our investigation that there were 1,504 establishments with a total labor force of 237,522 laborers in this city.<sup>1</sup> In this investigation, we had not been in strict adherence to the definition of a factory given in the Factory Law, which requires, that a factory should have a labor force of not less than 30 workers. In 1929, the project of a labor census was still an unrealized hope. Nevertheless, our plan to compile statistics of wage rates demanded a better knowledge of the total labor force in this city. Therefore, another inquiry was made in August, 1929, to check up the result of the previous investigation. In this inquiry, the method of estimating was emphasized. Actual investigations, however, were made wherever accessible. The method employed in the estimation and investigation of the total number of workers may be summarized as follows:

(1) Where employers' associations, labor unions, etc. exist, we are able to get hold of lists of establishments under the respective associations. With this information as our guide, direct inquiries are possible. As to those establishments which have not joined the associations, such information is lacking. Agents are sent by the Bureau to search the streets in the city for such establishments. This, however, cannot go very far as to cover every quarter and every crooked lane in this city. Investigations are not impossible where such establishments are of appreciable scale and well known to all. Small scale establishments, however, would inevitably escape our notice. Wherever direct investigation is impossible, a method of estimating has to be employed. The number of such establishments, the average number of laborers, and the proportion of male, female, and child workers are to be estimated, basing upon the information obtained by direct investigation. These estimated figures and figures obtained in direct inquiries, taken together, constitute the total number of laborers in the respective industries. Figures for workers in soap, silk reeling, cotton spinning, silk weaving, cotton weaving, knitting, bleaching and dyeing, and tobacco industries are obtained by this method.

(2) Where no employers' associations exist, agents are sent to different districts of the city for direct investigations. Information regarding unknown or inaccessible establishments, however, can only be in the form of estimates. Such estimates are based upon the reports of labor organizations, known establishments in the same industries, etc. Figures for workers in foundry, machinery, glass, tanning, and printing industries are obtained by this method.

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<sup>1</sup> Bureau of Social Affairs, City Government of Greater Shanghai: The Index Numbers of Earnings of the Factory Laborers in Greater Shanghai, July-December, 1928.

(3) There are certain industries which contain only a few well known establishments of large scale. Information regarding such establishments can easily be obtained. Establishments in the sawing, ship-building, match, enamel, flour, oils, egg and egg products, and paper industries are of this type.

Lists of the establishments and number of workers in various industries will be shown in Part II.



## CHAPTER 4

### CLASSIFICATION OF INDUSTRIES AND OCCUPATIONS

**A prerequisite to wage statistics**

In order to get a clear view of the wage conditions, laborers should be classified in the first instance according to the industry in which they are employed, and within each industry they be further classified according to their individual occupations. The classification according to industry brings the laborers into distinct categories, wherein workers in establishments of similar economic position are grouped together. The occupational classification discriminates further among the laborers in the same industry according to the particular jobs the workers are engaged in. Such classifications tend to display the special characteristics connected with the wage conditions of different industries and occupations. With the industries and occupations thus classified, the wage statistics would not only serve the purpose of providing rudimentary informations regarding the wages of laborers but are functional in avoiding a comparison of the wages of laborers differently occupied, and also in indicating the relative positions in the field of production. The classification of industries and occupations is therefore a prerequisite to the statistics of wages as it is to other branches of labor statistics.

**Classification, a difficult task**

In the classification of industries, the establishment is the technical unit. The establishments engaged in the production and distribution of goods and services are grouped into a number of industries, which in turn are brought under certain main classes. The task of classifying, however, is not an easy one. No definite principle exists governing the grouping of industries, and no clear demarcation can be drawn between certain classes. Overlapping and confusion are thus inevitable.

The task of occupational classification is even more perplexing. A classification of occupations deals with the isolated individuals in individual industries. So long as clear definitions of the different occupations and a generally accepted terminology do not exist in the various establishments, the problem of occupational classification is very difficult, if not impossible, without a careful inquiry into and a thorough understanding of the nature of the different jobs in the various industries.

**Merits of  
occupational  
classification**

A classification of industries alone can only give a general idea of the wages in different industries. The intricacy of the wage problem can only be shown by a further classification by occupation. An occupational classification provides, among other things, three valuable sorts of information:

- (1) It enumerates the various jobs in an industry, thus suggesting an idea of the nature of work in the industry.
- (2) It shows the different degrees of skill required of the various occupations, thus signifying the relation between wages and skill.
- (3) It permits a comparison of wages among different occupations within an industry.

Our experience with the classification of industries and in compiling wage statistics in Greater Shanghai may deserve some consideration. In our first attempt to make a statistical study of the actual monthly earnings of factory laborers in Greater Shanghai in 1928, practical difficulties made it impossible for us to inquire into the occupational classification of the various establishments. Earnings were therefore classified according to industries only. In the present study of the wage rates of factory laborers in Greater Shanghai, we succeeded in working out a system of occupational classification.

**Method of  
classification  
of  
industries**

Our system of classification of industries has been subjected to modifications during the course of our study. In the statistics of earnings in 1928, data were collected from 30 important industries. These 30 important industries were classified according to the nature of work, level of wages, and standard of skill into five groups with their respective constituent industries as follows:<sup>1</sup>

**I. Spinning and Weaving**

1. Silk Reeling
2. Cotton Spinning (Cotton Ginning included)
3. Silk Weaving
4. Cotton Weaving
5. Silk and Cotton Knitting
6. Wool Weaving

**II. Chemical Products**

1. Paper
2. Candle and Soap

<sup>1</sup> Ibid.

3. Matches
4. Paint and Varnish
5. Tanning
6. Glass
7. Enamel
8. Toilet Preparations
9. Bleaching and Dyeing

### III. Machinery and Building Materials

1. Machinery
2. Electrical Machines and Appliances
3. Foundry
4. Ship Building
5. Cement and Tiles
6. Sawing

### IV. Food Products

1. Flour
2. Oils and their By-products
3. Egg and Egg-products
4. Canned Foods
5. Cold Drinks and Refrigerating
6. Tobacco

### V. Miscellany

1. Water Works
2. Electricity
3. Printing (Printing Ink included)

**Scheme of International Labor Office** In the course of our work we have decided to abandon the old system and to adopt a more comprehensive scheme of classification of industries and occupations worked out by the International Labor Office as a result of the International Conference of Labor Statisticians held at Geneva in 1924. The method of classification suggested by the International Labor Office is based upon three principles: the materials worked in, the process of manufacture, and the nature of the products. But, it is impossible to choose one of these principles exclusively as the basis of classifying. A classification may be based upon two or all of these principles. In the earlier stage of manufacture one raw material usually predominates. The material worked in

might therefore be taken as basis. In the later stages of manufacture, however, the finished products generally require a combination of different materials and involve complex processes. In these cases, either the process or the nature of the products has to be taken as the leading principle. However, these three principles do not constitute the underlying factors behind such a classification. The real controlling principle lies in the nature of the industrial organization. Whether material, process or the finished product, either taken singly or in conjunction with one another, is sufficient as a factor in deciding upon a group, depends upon whether it is distinctive enough to have resulted in a separate industrial organization. Fundamentally, therefore, it is the organization of a distinctive industrial group that has the final sway in classification. The system of classification of the International Labor Office is as follows:<sup>1</sup>

(A) Primary Production

(I) Agriculture

(II) Mining and Quarrying

(B) Secondary Production

(III) Manufacturing Industries

(1) Wood Working

(2) Furniture Manufacture

(3) Metal Industry

(4) Machinery and Metal Tools and Utensils

(5) Construction of Boats, Ships, and Vehicles for Land and Air Transportation

(6) Manufacture of Bricks, Earthenware, Glass, etc.

(7) Construction of Buildings, and Making and Repairing of Roads, Railways, Bridges, and Canals, etc.

(8) Production and Transmission of Gas and Electricity, and Supply of Water and Water Power

(9) Manufacture of Chemicals and Allied Products

(10) Textile Industry

(11) Manufacture of Wearing Apparel

(12) Manufacture of Leather, Skin, and Rubber

(13) Manufacture of Foods, Drinks, and Tobacco

(14) Paper and Printing

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<sup>1</sup>International Labor Office: Systems of Classification of Industries and Occupations.

- (15) Manufacture of Clocks, Watches, and Musical and Scientific Instruments
- (16) Other Manufacturing Industries

(C) Services

- (IV) Transport and Communication
- (V) Commerce and Finance<sup>1</sup>
- (VI) Public Service and Defense
- (VII) Professional Services
- (VIII) Domestic and Personal Services.

This classification includes all the economic activities in a country. While in our study of wage rates and earnings, we have limited our scope to workers in manufacturing industries only. Even among the subdivisions under the manufacturing industries there are industries not included in our study. This is due either to the obstacles involved in the gathering of data or to a failure of these industries to live up to the standard of importance set up by the Bureau.

**Method of  
classifica-  
tion of  
occupations**

The method of classification of occupations in the statistics of wage rates is a pioneer attempt for this city. The International Labor Office has not laid down any standardized rules of grouping. We have, in classifying the occupations in an industry, one governing principle, — the process of manufacture. The work of classification of occupations in a given industry begins with a careful investigation of all kinds of work done by the laborers in a large number of establishments in a given industry, starting with the taking in of raw materials and ending with the sending out of manufactured goods in the form of finished products. Steps of similar nature are then grouped together as one occupation. No effort is spared in conducting these investigations. The list of classified occupations was sent to establishments of the respective industries for corrections. Revisions were made at the joint conferences between the Bureau and the managements of various establishments. The scheme of classification was finally adopted.

Such a classification of occupations will not correspond exactly to the original occupational divisions in the various establishments. There are jobs, which are essentially the same, but are under different names in different establishments. Such jobs have been taken together as a single occupation. The same job may

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<sup>1</sup>For the subdivisions of Group V, see "Classification of Industries and Occupations" in the Statistical Monthly, April, 1929, (Bureau of Statistics, Legislative Yuan, Nanking).

be found in several departments in a given industry, either practically similar or interchangeable. These are either combined or remain as they are as conditions warrant. In the working out of such a classification, we have tried as far as possible to make it neither too subtle so as to leave a mere superficial impression, nor too simple lest it should be difficult to appreciate the great diversity of jobs.

Such a classification of occupations, at best, is an initial attempt and no claim is made for the perfection of our scheme. Further, modernization of industries would make what appears to be workable now inapplicable in the future. Following is the list of classified occupations:

- I. Wood Working
  - A. The Sawing Industry
    - 1. Sawers
    - 2. Mechanics
    - 3. Coolies
- II. Metallurgy
  - A. The Foundry Industry
    - 1. Pattern-makers
    - 2. Moulders
    - 3. Blacksmiths
    - 4. Coolies
- III. Machinery & Metal Tools and Utensils
  - A. The Machinery Industry
    - 1. Fitters
    - 2. Turners
    - 3. Smiths
    - 4. Coolies
- IV. Construction of Boats, Ships, and Vehicles for Land & Air Transport
  - A. The Shipbuilding Industry
    - 1. Pattern-makers
    - 2. Moulders
    - 3. Blacksmiths
    - 4. Coppersmiths
    - 5. Turners
    - 6. Fitters
    - 7. Electricians
    - 8. Engine men
    - 9. Coolies
- V. Manufacture of Bricks, Earthenware, Glass, etc.
  - A. The Glass Manufacturing Industry
    - 1. Blowing and grinding
    - 2. Mould closing and conveying
    - 3. Melting and cooling
    - 4. Coolies
- VI. Manufacture of Chemicals and Allied Products
  - A. The Soap Making Industry
    - (a) Manufacturing Department
      - 1. Melting fats
      - 2. Soap making
      - 3. Glycerine refining
      - 4. Stamping
    - (b) Packing Department
      - 1. Wrapping
      - 2. Case making

- (c) Mechanical Department
    - 1. Mechanics
    - 2. Repairers
    - 3. Coolies
  - B. The Match Making Industry**
    - 1. Splint bundles
    - 2. Frame filling
    - 3. Paraffin applying
    - 4. Head dipping
    - 5. Head drying
    - 6. Frame emptying
    - 7. Box filling
    - 8. Box painting
    - 9. Packing
    - 10. Coolies
  - C. The Enamelling Industry**
    - (a) **Plaque Making Department**
      - 1. Shaping
      - 2. Repairing
    - (b) **Enamelling Department**
      - 1. Powder preparing
      - 2. Washing
      - 3. Enamelling
    - (c) **Painting Department**
      - 1. Design applying
      - 2. Designing
      - 3. Printing
      - 4. Coloring
    - (d) **Packing Department**
      - 1. Checking
      - 2. Wrapping
      - 3. Coolies
- VII. Textiles**
- A. The Silk Reeling Industry**
    - 1. Sorting
    - 2. Reeling
      - Regular workers
      - Substitute workers
      - Child workers
    - 3. Waste silk preparing
    - 4. Finishing
    - 5. Mechanics
    - 6. Coolies
  - B. The Cotton Spinning Industry**
    - (a) **Blowing Department**
      - 1. Mixing
      - 2. Scutching
      - 3. Cotton spinning, etc.
    - (b) **Carding Department**
      - 1. Stripping
      - 2. Carding
      - 3. Others
    - (c) **Roving Department**
      - 1. Foremen or women, No. 1
      - 2. Drawing
      - 3. Roving
      - 4. Others
    - (d) **Spinning Department**
      - 1. Foremen or women, No. 1
      - 2. Ring spinning

3. Bobbing
  4. New hands
  5. Others
  6. Yarn testing
- (e) Reeling Department
1. Foremen or women, No. 1.
  2. Reeling
  3. Others
- (f) Baling Department
1. Weighing
  2. Bundling
  3. Others
- (g) Waste Cotton Department
1. Waste cotton picking
  2. Others
- (h) Mechanical Department
1. Repairers
  2. Mechanics
  3. Smiths
  4. Coolies
- C. The Silk Weaving Industry**
- (a) Warping Department
1. Winding
  2. Doubling
  3. Sizing
  4. Warping
  5. Knotting
- (b) Quilling Department
1. Winding
  2. Doubling
  3. Spinning
  4. Quilling
- (c) Weaving Department
1. Weaving
  2. New hands
- (d) Mechanical Department
1. Mechanics
  2. Coolies
- D. The Cotton Weaving Industry**
- (a) Warping Department
1. Foremen or women, No. 1
  2. Warping
  3. Warp winding
  4. Filling winding
  5. Sizing
  6. Drawing
  7. Others
- (b) Weaving Department
1. Foremen or women, No. 1
  2. Weaving
  3. Others
- (c) Finishing and Mechanical Department
1. Finishing
  2. Mechanics and smiths
  3. Coolies



**E. The Silk and Cotton Knitting Industry**

- (a) **Winding Department**
  - 1. Cone winding
  - 2. Silk winding
- (b) **Knitting Department**
  - 1. Hand machine knitting
  - 2. Electric knitting
  - 3. Looping
  - 4. Others
- (c) **Finishing Department**
  - 1. Dyeing and drying
  - 2. Finishing and pressing
  - 3. Assorting
  - 4. Mechanics

**F. The Bleaching and Dyeing Industry**

- 1. Rolling
- 2. Dyeing
- 3. Twisting
- 4. Finishing

**VIII. Manufacture of Leather, Skin, and Rubber****A. The Tanning Industry**

- (a) **Hide and Leather Manufacturing Department**
  - 1. Whitening
  - 2. Tanning
  - 3. Finishing
  - 4. Others
- (b) **Mechanical Department**
  - 1. Mechanics
  - 2. Coolies

**IX. Manufacture of Foods, Drinks and Tobacco****A. The Flour Industry**

- 1. Wheat filling
- 2. Milling
- 3. Baling
- 4. Flour filling
- 5. Mechanics and smiths
- 6. Repairers
- 7. Coolies

**B. The Oil Making Industry**

- 1. Oil pressing
- 2. Refining
- 3. Mechanics
- 4. Repairers
- 5. Coolies

**C. The Egg Produce Industry**

- 1. Egg receiving
- 2. Candling
- 3. Egg breaking
- 4. Canning and cold storing
- 5. Albumen drying
- 6. Packing
- 7. Smiths and coolies

**D. The Tobacco Industry**

- (a) **Leaf Department**
  - 1. Blending
  - 2. Stemming
  - 3. Cutting

- (b) **Manufacturing Department**
    - 1. Rolling
    - 2. Drying
    - 3. Sorting
  - (c) **Packing Department**
    - 1. Wrapping
    - 2. Tin filling
    - 3. Casing
    - 4. Cardboard box making
  - (d) **Mechanical Department**
    - 1. Mechanics
    - 2. Repairers
    - 3. Coolies
- X. Paper and Printing**
- A. The Paper Making Industry**
    - (a) **Raw Material Department**
      - 1. Sorting
      - 2. Cutting and dusting
      - 3. Cooking
      - 4. Beating
    - (b) **Manufacturing Department**
      - 1. Paper making
      - 2. Paper receiving
      - 3. Counting and assorting
    - (c) **Mechanical Department**
      - 1. Mechanics
      - 2. Repairers
      - 3. Coolies
  - B. The Printing Industry**
    - (a) **Letter Press Printing Department**
      - 1. Type-casting
      - 2. Type-composing
      - 3. Plate-making
      - 4. Printing
      - 5. Bookbinding
    - (b) **Lithographic Printing Department**
      - 1. Drawing and engraving
      - 2. Plate-making
      - 3. Printing
      - 4. Finishing and cutting
    - (c) **Art and Photo-engraving Department**
      - 1. Photo-engraving
      - 2. Copper plate engraving
    - (d) **Miscellaneous Department**
      - 1. Mechanics and smiths
      - 2. Coolies

## CHAPTER 5

### INDEX NUMBERS OF WAGES

**Formulae  
used**

For the purpose of simplifying the making of comparisons, the use of index numbers is very valuable. Index numbers may be used either to show the movement of wages over a period of years, or to show the relation between the wages of various groups of laborers to one another at a given date. In the computation of index numbers, the formulæ used and the base period form the two fundamentals which require careful study. Different formulæ for computing index numbers are used in the wage statistics published in different countries.<sup>1</sup> In South Africa and the United States, the method of weighted arithmetic averages is used; in other countries, such as Germany, Australia, Canada, Denmark, Italy, and the United Kingdom, the method of simple arithmetic averages is used. Great controversies exist among the advocates of the different formulae regarding their respective merits. The method of simple arithmetic averages gains in the simplicity in calculation but suffers from the unreliability of the result. The method of weighted averages, on the other hand, yields a more dependable result but often involves complicated calculation. An "ideal" formula, was suggested by Prof. Irving Fisher. But this formula is evidently too complex as the weights employed are subject to variation. A simpler formula of weighted aggregates bearing results approximating that computed by the "ideal" formula is also suggested. This formula reads as follows :

$$\frac{\sum p_1 q_0}{\sum p_0 q_0}$$

In the formula,  $q_0$  stands for the number of a given type (male, female, or child workers) of laborers in a given occupation of an industry at the base period;  $p_0$ , the average wage of these laborers at the base period; and  $p_1$ , the average wage of these laborers at a given period. This formula claims the merits both of accurate result and simple calculation. Results of this formula differ from those of the "ideal" formula, by less than one per cent. The weights used in this formula are the number of laborers at the base period which remains unchanged. The changes in the index numbers of wages are the resultant of two variables; the changes in the wages themselves and changes in the number of laborers. In

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<sup>1</sup>International Labor Office: *Methods of Statistics of Wages and Hours of Labor*, pp. 33-58.

this formula, the invariability of the number of workers, that is the weights is assumed. Thus, the complication with variable weights is avoided. However, these weights may gradually grow out of date due to changing conditions. They will have to be revised when need arises.

**Base period** In the compilation of index numbers of earnings, an attempt is made to fix the base period at the year 1926, which seemed to be a satisfactory period not only suitable to the economic conditions in this country, but also in accordance with the general practices in other countries. But it was found practically impossible to gather data for the back years. Some of the establishments under investigation are new plants not existing at that time. Some have changed hands since then, and some fail to keep books in files. We then turned our attention to the year 1930. This year was suggested by the Second International Conference of Labor Statisticians, held under the auspices of the International Labor Office at Geneva in 1925, as the suitable base year for the index numbers of cost of living. However sound this base year may be theoretically, we do not feel safe to base the index numbers upon the result of the work in the short period of two or three years. Moreover, to what extent the high price of gold in 1930 affects the living conditions of laborers, no one can tell definitely at the present. The suitability of the year 1930 as the base year, therefore, still requires careful study. As a matter of fact, the compilation of index numbers is but of secondary importance. So long as the data required are gathered and tabulated, the index numbers can be figured out as soon as the weights are fixed.

**Other problems** Besides these two fundamentals, several problems demand careful consideration in connection with the compilation of the index numbers.<sup>1</sup> A brief account of each will ensue in the following passages:

(1) The problem of skill — Wages tend to vary with the type of industries, the nature of occupations, and the sex and age of the laborers. But, above all, the amount of wages depends more upon the skill of laborers than anything else. It is, therefore, highly desirable that in the compilation of index numbers, aside from the classification of the laborers according to industries, occupations, sex and age, a classification according to skill should be introduced, such that the index numbers would be able to indicate the relationship between wages and skill. There are many gradations among those employed in manufacturing industries, ranging from those who contribute only their muscular

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<sup>1</sup>Bureau of Social Affairs, City Government of Greater Shanghai: *The Index Numbers of Earnings of the Factory Laborers in Greater Shanghai, July-December, 1928.*

force to the work of production to those who apply great skill and dexterity. Laborers of the same sex and age, employed in the same occupation in an industry, and having worked the same length of time, may receive different remuneration owing to differences in the skill they possess. The general practice in various countries is to divide the laborers into three distinct groups, the skilled, the semi-skilled, and the unskilled. However, such a classification is at present hardly practicable. The idea of what constitutes skill differs so widely from industry<sup>s</sup> to industry. No uniform principle can be arrived at among various establishments regarding the measurement of the degree of skill. The statistics of earnings is therefore classified only according to the sex and age of laborers into three types, the male, female and child workers; and that of wage rates is further classified according to occupations, beside a distinction in the sex and age of the laborers. A classification of the laborers by occupations, though not indicating explicitly the difference in skill, does at least tend to suggest a rough idea as to the degree of skill required of the laborers differently occupied. It fails to show the difference in skill among laborers within an occupation, but it tells by the nature of the occupations what part dexterity and intelligence play in different jobs. Such a classification, therefore, affords a basis for the introduction of a classification of skill into the compilation of index numbers.

(2) The problem of absent laborers. — Full attendance is not to be expected from every laborer and the number of days absent varies. The inclusion of the absent workers in the calculation will necessarily lower the average earnings. The adoption of different systems of rewards, however, tends to minimize the number of such workers. During our tryout investigation, attempt was made to reject these workers from all industries. In a factory where the number of laborers is over one thousand, difficulty is at once met with in picking out such workers. Further, the index we are compiling is one of actual earnings. The rejection of such workers would be an instance of the presence of personal element in our work. During our monthly investigation, however, the number of such workers is taken down in so far as possible in order to ascertain the amount of variation from month to month.

(3) The problem of board and lodging — Some establishments supply board and lodging for laborers gratis. In such establishments, wages are generally lower than those laborers who have to provide their own board and lodging. However, the grant of board and lodging constitutes an important item of the laborers' actual income, which must not be neglected in compiling wage statistics. We have set up a rule to take care of this problem. For board granted to a laborer, \$6.00 per month will be added to his wages; and for lodging, \$2.00 will be added.

Unless where the amount for board and lodging is specified by the establishments, the rule is observed in the statistics of earnings as well as of wage rates. Thus, the discrepancies between the wage level in establishments supplying free board and lodging and that in establishments where laborers provide their own are minimized.

## CHAPTER 6

### STATISTICS OF HOURS OF LABOR

#### Objects of Statistics of hours of labour

The objects for the compilation of statistics of hours of labor, like those of wage statistics, arise out of the nature of the labor contract. The employer is interested in the number of hours which his work people may be employed in relation to the wages which he pays; while the laborer is interested in the length of his working hours as an element in his standard of life. The main objects are therefore to give informations as to the duration of labor in relation to (1) production, and (2) conditions of labor.

#### Full time hours and actual hours

The statistics of hours of labor are of various kinds:<sup>1</sup> In relation to production, statistics of full-time hours are of chief importance; and from the point of view of conditions of labor, statistics of actual hours are of interest. Full-time hours, also called regular, customary, normal, standard, or basic hours, are the hours worked by the wage earners when the establishment is running full time, less the regular time off duty for the mid-day meal, and excluding overtime or short time. As with wage rates, full-time hours are generally fixed before the work is undertaken. They may be determined by individual or collective agreement between employers and laborers, or established by law or other recognized authorities. Actual hours means the hours actually worked in a week, including overtime or short time. They may be either more or less than the stipulated full-time hours due to the inclusion of overtime or short time. The statistics of actual hours bears resemblance and is an indispensable supplement to the statistics of actual earnings.

#### Other terms

Other terms used in connection with the duration of labor are "prevailing hours" and "union hours." "Prevailing hours" means the normal hours a plant works, exclusive of overtime or short time. The term "prevailing hours" is used in speaking of plants, and "full-time hours" is speaking of persons. "Union hours" means the hours of labor agreed to or accepted by an organization of trade unionists and their employers, under which agreement union men actually work.<sup>2</sup>

The problem of hours of labor has not as yet reached prominence in the industrial world of this country. Both employers and laborers seem to fix their

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<sup>1</sup>International Labor Office: Methods of Statistics of Wages and Hours of Labor, pp. 28-30.

<sup>2</sup>International Labor Office: Hours of Labor in the United States, p. 3.

attention upon the problem of wages, and no labor conflicts of great importance are attributable to disputes regarding the duration of labor.<sup>1</sup> Only in a few establishments are the hours of labor the result of an agreement between the employers and laborers. In the majority of cases, the management fixes the number of hours for a regular day's work and decides upon the matter of overtime and short time.

**Number of hours worked per day**      The period taken as the most satisfactory basis for statistics of hours may vary for different groups of workers, but in general the most suitable period is that of a week. If only the number of hours per day are given, it is not clear whether a short day is worked on Saturday or on some other day. However, information as to what number of hours constitute a full time week is of little value in the preparation of the present study of hours of work in Greater Shanghai. Laborers in this city are generally paid monthly or daily, but rarely weekly, wages. What we are interested in is the actual number of hours worked per day by the individual laborers in an industry, from which the average number of hours per day for the industry are computed. The data of wage rates collected are reduced to hourly rates, which are multiplied by the average hours per day to give the average wage rates per day. Thus, the average number of hours per day in the present study shows some departure from the full-time hours per day. The actual number of hours per day correspond quite closely to the prevailing hours in various establishments, since a majority of laborers actually work for the number of hours fixed by the management. However, in the case of piece workers, the number of hours worked do not conform so well to the prevailing hours fixed by the managements. They tend to vary with individual laborers, and careful inquiry into the duration of labor of every piece worker has to be made. The process of investigation, therefore, is much more complicated in the case of piece workers than of time workers.

**Collection of data**      The methods of collection and computation in compiling the statistics of hours of labor require some explanation. In view of practical difficulties, the statistics of hours of labor was not compiled when we first took up the study of actual earnings. The figures regarding the hours of labor as appeared in the "Wage Tables of Factory Laborers in Various Industries" in the publication titled "Index Numbers of Earnings of Factory Laborers in Greater Shanghai", are but results of an inquiry approximating the "modal" number of hours worked. The project of collecting data for the statistics of hours of labor was carried out coincidentally with that of wage rates. The date of

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<sup>1</sup>Bureau of Social Affairs, City Government of Greater Shanghai: *Strikes and Lockouts, 1929*. Commercial Press, 1930.



investigation is likewise fixed at September 25, and the first inquiry was made on September 25, 1929. With regard to time workers the task of collection is relatively simple. The number of hours worked by laborers in different occupations of an industry vary to a small extent only. The hours of labor of piece workers, on the other hand, vary with most individual workers. Difference in skill, in bodily strength, in the intensity of labor, and in the quality of implements worked with, directly or indirectly, tend to produce variations in the working hours of piece workers. Detailed records of the number of hours worked by laborers in different occupations of various establishments in September 25, (separately for male, female and child workers, and also for time and piece workers), are specially kept by the respective managements in accordance with our request. In case these records are not ready on date, 2 or 3 days' delay would be allowed. A delay in the collection of the data of hours of labor naturally necessitates a similar postponement of the date for the collection of wage data.

**Method of  
computation**

The method of computation employed is similar to that in the case of wage statistics. The average number of hours worked per day are computed for the individual occupations by the method of weighted arithmetic averages. From these figures, weighted averages for the individual industries are computed. Again, in view of the great discrepancy shown between the working hours of time workers and those of piece workers, their respective data are treated separately.

## PART II

### Statistics of Wage Rates and Hours of Labor in 1929

#### CHAPTER I

##### ANALYSIS OF THE NUMBER OF ESTABLISHMENTS AND LABORERS IN VARIOUS INDUSTRIES<sup>1</sup>

The introductory part of this publication has been devoted to a discussion of theories and an explanation of methods in connection with the compilation of statistics of wages and hours of labor in Greater Shanghai. This and the following part will deal with an enumeration of the statistical data and an analysis of the results.

**Total number of establishments and laborers** As we have seen above, an investigation into the total number of laborers in the various industries is a prerequisite to the compilation of wage statistics. The representativeness of the samples chosen depends upon a comprehension of the constitution and the relative importance of the various industries. Therefore, before we proceeded to gather wage data, an inquiry into the total number of laborers in the various industries had been made. In the inquiry, however, actual investigation was made as far as possible, and methods of estimation were used only when direct inquiry had been proved impracticable. The results of the inquiry have been tabulated in a number of tables, which will be found in the following pages.

In the following tables, both the results of investigation and estimation are given. Explanations as to the source of information, number of establishments and laborers investigated, number of establishments and laborers estimated, and the method of estimation are shown under each table. The establishments in an industry are arranged in order of their respective number of laborers. Such an arrangement tends to indicate the relative positions of these establishments in the industry with respect to the size of labor force.

**Industries classified according to the number of establishments and laborers** So far as the number of establishments are concerned, the machinery industry leads all other industries with 518 establishments. Then follows printing industry with 419 establishments; cotton weaving, 405; knitting, 177; tanning 150; foundry, 120; and silk reeling, 107. Industries having from 50 to 99 establishments consist

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<sup>1</sup>Only the figures in this publication are considered as final.

of the following: cotton spinning, silk weaving, and tobacco; from 10 to 49: sawing, ship-building, glass, soap, enamel, bleaching and dyeing, flour, and oil; under 10: match, egg, and paper. However, the large number of establishments in a given industry does not necessarily mean a corresponding increase in the number of laborers in the same industry. The number of laborers in an industry depends upon the size of establishments and the nature of work. Cotton spinning leads all other industries in the number of laborers with a labor force of 110,882 workers. Silk reeling ranks second with 51,376 laborers. Then follows cotton weaving with 29,244 laborers; tobacco, 24,297; printing, 13,337; and silk and cotton knitting, 10,125. Industries with from 5,000 to 9,999 laborers include the following: machinery and shipbuilding; from 3,000 to 4,999: glass, silk weaving, and egg; from 1,000 to 2,999: sawing, foundry, soap, match, enamel, bleaching and dyeing, tanning, flour, oil, and paper. In these 21 industries, there are altogether 2,326 establishments and 285,700 laborers, of which 84,786 or 29.7% are male workers, 173,432 or 60.7% female workers, and 27,482 or 9.6% child workers.<sup>1</sup> Following are the tables showing the number of establishments and laborers in the various industries:

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<sup>1</sup>Child workers are, according to the customary standard of the age of minority, workers under 16 years of age. However, it is impossible to ascertain accurately the ages of all the workers covered in the investigation. The classification between adult and child workers is, therefore, not made with respect to the strict sense of the term.

TABLE I

NUMBER OF ESTABLISHMENTS AND LABORERS IN THE SAWING INDUSTRY

| ESTABLISHMENTS | NO. OF LABORERS |        |       |       | ESTABLISHMENTS | NO. OF LABORERS |        |       |       |
|----------------|-----------------|--------|-------|-------|----------------|-----------------|--------|-------|-------|
|                | MALE            | FEMALE | CHILD | TOTAL |                | MALE            | FEMALE | CHILD | TOTAL |
| No. 1.         | 381             |        |       | 381   | No. 14.        | 20              |        |       | 20    |
| 2.             | 356             |        |       | 356   | 15.            | 18              |        |       | 18    |
| 3.             | 350             |        |       | 350   | 16.            | 16              |        |       | 16    |
| 4.             | 230             |        |       | 230   | 17.            | 7               |        |       | 7     |
| 5.             | 193             |        |       | 193   | 18.            | 6               |        |       | 6     |
| 6.             | 82              |        |       | 82    | 19.            | 6               |        |       | 6     |
| 7.             | 44              |        |       | 44    | 20.            | 6               |        |       | 6     |
| 8.             | 35              |        |       | 35    | 21.            | 6               |        |       | 6     |
| 9.             | 35              |        |       | 35    | 22.            | 4               |        |       | 4     |
| 10.            | 24              |        |       | 24    | 23.            | 4               |        |       | 4     |
| 11.            | 23              |        |       | 23    |                |                 |        |       |       |
| 12.            | 20              |        |       | 20    |                |                 |        |       |       |
| 13.            | 20              |        |       | 20    |                |                 |        |       |       |
|                |                 |        |       |       | TOTAL          | 1,886           |        |       | 1,886 |

In only a few mills in the sawing industry in this city is machinery installed. Such mills are generally given the name "factory"; the term "Hong" is also used.

The above figures represent the result of an investigation conducted by the Bureau in August, 1929. The number of establishments investigated amount to 23, and that of laborers investigated to 1,886.

The above table is inclusive of all sawing mills where machinery is used, but is exclusive of those "Hong" where laborers form the chief factor of production. The latter type represents largely dealers in wood, sawing being only a side line.

TABLE 2

## NUMBER OF ESTABLISHMENTS AND LABORERS IN THE FOUNDRY INDUSTRY

| ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |       | ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |       |
|--------------------------|-----------------|--------|-------|-------|--------------------------|-----------------|--------|-------|-------|
|                          | MALE            | FEMALE | CHILD | TOTAL |                          | MALE            | FEMALE | CHILD | TOTAL |
| No. 1.                   | 131             |        | —     | 131   | No. 53.                  | 11              |        | —     | 11    |
| 2.                       | 46              |        | —     | 46    | 54.                      | 9               |        | 2     | 11    |
| 3.                       | 32              |        | 8     | 40    | 55.                      | 8               |        | 2     | 10    |
| 4.                       | 30              |        | 10    | 40    | 56.                      | 10              |        | —     | 10    |
| 5.                       | 24              |        | 12    | 36    | 57.                      | 10              |        | —     | 10    |
| 6.                       | 23              |        | 10    | 33    | 58.                      | 1               |        | 9     | 10    |
| 7.                       | 17              |        | 15    | 32    | 59.                      | 2               |        | 8     | 10    |
| 8.                       | 16              |        | 15    | 31    | 60.                      | 4               |        | 5     | 9     |
| 9.                       | 12              |        | 18    | 30    | 61.                      | 4               |        | 5     | 9     |
| 10.                      | 20              |        | 8     | 28    | 62.                      | 6               |        | 2     | 8     |
| 11.                      | 21              |        | 6     | 27    | 63.                      | 3               |        | 4     | 7     |
| 12.                      | 27              |        | —     | 27    | 64.                      | 4               |        | 3     | 7     |
| 13.                      | 26              |        | —     | 26    | 65.                      | 4               |        | 3     | 7     |
| 14.                      | 20              |        | 5     | 25    | 66.                      | 4               |        | 3     | 7     |
| 15.                      | 11              |        | 14    | 25    | 67.                      | 3               |        | 4     | 7     |
| 16.                      | 18              |        | 7     | 25    | 68.                      | 2               |        | 4     | 6     |
| 17.                      | 18              |        | 6     | 24    | 69.                      | 2               |        | 4     | 6     |
| 18.                      | 15              |        | 8     | 23    | 70.                      | 3               |        | 3     | 6     |
| 19.                      | 13              |        | 9     | 22    | 71.                      | 4               |        | 2     | 6     |
| 20.                      | 22              |        | —     | 22    | 72.                      | 2               |        | 4     | 6     |
| 21.                      | 13              |        | 8     | 21    | 73.                      | 2               |        | 3     | 5     |
| 22.                      | 20              |        | —     | 20    | 74.                      | 3               |        | 2     | 5     |
| 23.                      | 15              |        | 5     | 20    | 75.                      | 1               |        | 4     | 5     |
| 24.                      | 12              |        | 8     | 20    | 76.                      | 3               |        | 2     | 5     |
| 25.                      | 19              |        | —     | 19    | 77.                      | 3               |        | 2     | 5     |
| 26.                      | 10              |        | 8     | 18    | 78.                      | 3               |        | 2     | 5     |
| 27.                      | 13              |        | 5     | 18    | 79.                      | 3               |        | 2     | 5     |
| 28.                      | 10              |        | 7     | 17    | 80.                      | —               |        | 5     | 5     |
| 29.                      | 6               |        | 11    | 17    | 81.                      | 1               |        | 4     | 5     |
| 30.                      | 5               |        | 12    | 17    | 82.                      | 1               |        | 3     | 4     |
| 31.                      | 10              |        | 7     | 17    | 83.                      | —               |        | 4     | 4     |
| 32.                      | 5               |        | 11    | 16    | 84.                      | 1               |        | 3     | 4     |
| 33.                      | 4               |        | 12    | 16    | 85.                      | 1               |        | 3     | 4     |
| 34.                      | 10              |        | 5     | 15    | 86.                      | 1               |        | 3     | 4     |
| 35.                      | 12              |        | 3     | 15    | 87.                      | 4               |        | —     | 4     |
| 36.                      | 11              |        | 4     | 15    | 88.                      | 2               |        | 1     | 3     |
| 37.                      | 9               |        | 6     | 15    | 89.                      | 1               |        | 2     | 3     |
| 38.                      | 15              |        | —     | 15    | 90.                      | 1               |        | 2     | 3     |
| 39.                      | 14              |        | —     | 14    | 91.                      | —               |        | 3     | 3     |
| 40.                      | 9               |        | 5     | 14    | 92.                      | 1               |        | 2     | 3     |
| 41.                      | 10              |        | 4     | 14    | 93.                      | 1               |        | 2     | 3     |
| 42.                      | 12              |        | 2     | 14    | 94.                      | 1               |        | 2     | 3     |
| 43.                      | 9               |        | 5     | 14    | 95.                      | 1               |        | 2     | 3     |
| 44.                      | 8               |        | 5     | 13    | 96.                      | 1               |        | 2     | 3     |
| 45.                      | 4               |        | 9     | 13    | 97.                      | 2               |        | —     | 2     |
| 46.                      | 13              |        | —     | 13    | 98.                      | —               |        | 2     | 2     |
| 47.                      | 12              |        | —     | 12    | 99.                      | 1               |        | 1     | 2     |
| 48.                      | 2               |        | 10    | 12    | 100.                     | 1               |        | 1     | 2     |
| 49.                      | 7               |        | 5     | 12    |                          |                 |        |       |       |
| 50.                      | 8               |        | 3     | 11    |                          |                 |        |       |       |
| 51.                      | 6               |        | 5     | 11    |                          |                 |        |       |       |
| 52.                      | 6               |        | 5     | 11    |                          |                 |        |       |       |
|                          |                 |        |       |       | TOTAL                    | 997             |        | 452   | 1,449 |

SOURCES OF INFORMATION: REPORT OF THE COPPER AND IRON INDUSTRY  
EMPLOYERS' ASSOCIATION, WARD ROAD, SHANGHAI

|                                     |       |
|-------------------------------------|-------|
| No. of establishments investigated: | 100   |
| „ laborers                          | 1,449 |
| „ establishments estimated:         | 20    |
| „ laborers                          | 200   |
| Method of estimation:               |       |

According to the list submitted by the Copper and Iron Industry Employers' Association, there are 30 foundries with no account regarding the number of laborers in them. As a result of an investigation in August 1929, the number of establishments investigated amount to 100 and laborers 1,499. The investigation does not claim to be inclusive of those foundries which are of very small size and which are situated in some unfrequented quarters. Some such establishments would inevitably escape the notice of the agents. It is estimated, however, that the number of establishments overlooked amount to 20 with about 10 laborers in each, making a total of 200 laborers, among them 68% or 136 laborers being male workers and 32% or 64 being child workers. The establishments investigated and estimated taken together, amount to 120. The total number of laborers investigated and estimated is 1,649, of which 1,133 are male workers and 516 child workers.

TABLE 3

## NUMBER OF ESTABLISHMENTS AND LABORERS IN THE MACHINERY INDUSTRY

| ESTABLISHMENTS | NO. OF LABORERS |        |       |       | ESTABLISHMENTS | NO. OF LABORERS |        |       |       |
|----------------|-----------------|--------|-------|-------|----------------|-----------------|--------|-------|-------|
|                | MALE            | FEMALE | CHILD | TOTAL |                | MALE            | FEMALE | CHILD | TOTAL |
| No. 1.         | 1,452           |        | —     | 1,452 | No. 53.        | 26              |        | —     | 26    |
| 2.             | 195             |        | 100   | 295   | 54.            | 11              |        | 14    | 25    |
| 3.             | 279             |        | —     | 279   | 55.            | 10              |        | 15    | 25    |
| 4.             | 275             |        | —     | 275   | 56.            | 15              |        | 10    | 25    |
| 5.             | 180             |        | —     | 180   | 57.            | 7               |        | 17    | 24    |
| 6.             | 169             |        | —     | 169   | 58.            | 11              |        | 13    | 24    |
| 7.             | 88              |        | 32    | 120   | 59.            | 24              |        | —     | 24    |
| 8.             | 80              |        | 32    | 112   | 60.            | 4               |        | 20    | 24    |
| 9.             | 64              |        | 42    | 106   | 61.            | 16              |        | 8     | 24    |
| 10.            | 76              |        | 26    | 102   | 62.            | 11              |        | 12    | 23    |
| 11.            | 65              |        | 30    | 95    | 63.            | 10              |        | 13    | 23    |
| 12.            | 53              |        | 30    | 83    | 64.            | 23              |        | —     | 23    |
| 13.            | 56              |        | 26    | 82    | 65.            | 5               |        | 18    | 23    |
| 14.            | 47              |        | 25    | 72    | 66.            | 14              |        | 9     | 23    |
| 15.            | 46              |        | 25    | 71    | 67.            | 5               |        | 17    | 22    |
| 16.            | 30              |        | 28    | 58    | 68.            | 11              |        | 11    | 22    |
| 17.            | 40              |        | 15    | 55    | 69.            | 13              |        | 9     | 22    |
| 18.            | 40              |        | 13    | 53    | 70.            | 8               |        | 14    | 22    |
| 19.            | 24              |        | 28    | 52    | 71.            | 10              |        | 11    | 21    |
| 20.            | 33              |        | 16    | 49    | 72.            | 21              |        | —     | 21    |
| 21.            | 30              |        | 18    | 48    | 73.            | 8               |        | 13    | 21    |
| 22.            | 20              |        | 26    | 46    | 74.            | 7               |        | 14    | 21    |
| 23.            | 23              |        | 19    | 42    | 75.            | 6               |        | 15    | 21    |
| 24.            | 42              |        | —     | 42    | 76.            | 7               |        | 14    | 21    |
| 25.            | 17              |        | 25    | 42    | 77.            | 20              |        | —     | 20    |
| 26.            | 22              |        | 19    | 41    | 78.            | 8               |        | 12    | 20    |
| 27.            | 16              |        | 25    | 41    | 79.            | 8               |        | 12    | 20    |
| 28.            | 25              |        | 16    | 41    | 80.            | 15              |        | 5     | 20    |
| 29.            | 30              |        | 10    | 40    | 81.            | 6               |        | 14    | 20    |
| 30.            | 16              |        | 24    | 40    | 82.            | 13              |        | 7     | 20    |
| 31.            | 15              |        | 24    | 39    | 83.            | 4               |        | 16    | 20    |
| 32.            | 38              |        | —     | 38    | 84.            | 10              |        | 10    | 20    |
| 33.            | 38              |        | —     | 38    | 85.            | 8               |        | 12    | 20    |
| 34.            | 11              |        | 27    | 38    | 86.            | 20              |        | —     | 20    |
| 35.            | 37              |        | —     | 37    | 87.            | 6               |        | 14    | 20    |
| 36.            | 37              |        | —     | 37    | 88.            | 5               |        | 15    | 20    |
| 37.            | 36              |        | —     | 36    | 89.            | 7               |        | 13    | 20    |
| 38.            | 20              |        | 15    | 35    | 90.            | 11              |        | 8     | 19    |
| 39.            | 17              |        | 16    | 33    | 91.            | 12              |        | 7     | 19    |
| 40.            | 24              |        | 8     | 32    | 92.            | 19              |        | —     | 19    |
| 41.            | 18              |        | 13    | 31    | 93.            | 19              |        | —     | 19    |
| 42.            | 16              |        | 13    | 29    | 94.            | 3               |        | 16    | 19    |
| 43.            | 13              |        | 16    | 29    | 95.            | 11              |        | 8     | 19    |
| 44.            | 21              |        | 8     | 29    | 96.            | 9               |        | 10    | 19    |
| 45.            | 16              |        | 12    | 28    | 97.            | 6               |        | 13    | 19    |
| 46.            | 28              |        | —     | 28    | 98.            | 7               |        | 12    | 19    |
| 47.            | 28              |        | —     | 28    | 99.            | 9               |        | 9     | 18    |
| 48.            | 8               |        | 19    | 27    | 100.           | 6               |        | 12    | 18    |
| 49.            | 13              |        | 9     | 27    | 101.           | 8               |        | 10    | 18    |
| 50.            | 15              |        | 11    | 26    | 102.           | 7               |        | 11    | 18    |
| 51.            | 23              |        | 3     | 26    | 103.           | 15              |        | 3     | 18    |
| 52.            | 8               |        | 18    | 26    | 104.           | 9               |        | 9     | 18    |

TABLE 3

## NUMBER OF ESTABLISHMENTS AND LABORERS IN THE MACHINERY INDUSTRY

(Continued)

| ESTABLISHMENTS | NO. OF LABORERS |        |       |       | ESTABLISHMENTS | NO. OF LABORERS |        |       |       |
|----------------|-----------------|--------|-------|-------|----------------|-----------------|--------|-------|-------|
|                | MALE            | FEMALE | CHILD | TOTAL |                | MALE            | FEMALE | CHILD | TOTAL |
| No. 105.       | 13              |        | 5     | 18    | No. 157.       | 8               |        | 6     | 14    |
| 106.           | 3               |        | 15    | 18    | 158.           | 5               |        | 9     | 14    |
| 107.           | 4               |        | 14    | 18    | 159.           | 4               |        | 10    | 14    |
| 108.           | 6               |        | 12    | 18    | 160.           | 8               |        | 6     | 14    |
| 109.           | 8               |        | 9     | 17    | 161.           | 8               |        | 5     | 13    |
| 110.           | 8               |        | 9     | 17    | 162.           | 6               |        | 7     | 13    |
| 111.           | 9               |        | 8     | 17    | 163.           | 4               |        | 9     | 13    |
| 112.           | 7               |        | 10    | 17    | 164.           | 6               |        | 7     | 13    |
| 113.           | 7               |        | 10    | 17    | 165.           | 3               |        | 10    | 13    |
| 114.           | 11              |        | 6     | 17    | 166.           | 3               |        | 10    | 13    |
| 115.           | 9               |        | 8     | 17    | 167.           | 5               |        | 8     | 13    |
| 116.           | 5               |        | 12    | 17    | 168.           | 6               |        | 7     | 13    |
| 117.           | 9               |        | 8     | 17    | 169.           | 10              |        | 3     | 13    |
| 118.           | 9               |        | 8     | 17    | 170.           | 6               |        | 7     | 13    |
| 119.           | 7               |        | 10    | 17    | 171.           | 5               |        | 8     | 13    |
| 120.           | 5               |        | 12    | 17    | 172.           | 8               |        | 5     | 13    |
| 121.           | 9               |        | 8     | 17    | 173.           | 8               |        | 5     | 13    |
| 122.           | 6               |        | 10    | 16    | 174.           | 2               |        | 11    | 13    |
| 123.           | 4               |        | 12    | 16    | 175.           | 5               |        | 7     | 12    |
| 124.           | 8               |        | 8     | 16    | 176.           | 3               |        | 9     | 12    |
| 125.           | 8               |        | 8     | 16    | 177.           | 7               |        | 5     | 12    |
| 126.           | 12              |        | 4     | 16    | 178.           | 4               |        | 8     | 12    |
| 127.           | 2               |        | 14    | 16    | 179.           | 7               |        | 5     | 12    |
| 128.           | 2               |        | 14    | 16    | 180.           | 2               |        | 10    | 12    |
| 129.           | 7               |        | 9     | 16    | 181.           | 5               |        | 7     | 12    |
| 130.           | 6               |        | 10    | 16    | 182.           | 2               |        | 10    | 12    |
| 131.           | 8               |        | 8     | 16    | 183.           | 8               |        | 4     | 12    |
| 132.           | 8               |        | 8     | 16    | 184.           | 4               |        | 8     | 12    |
| 133.           | 9               |        | 7     | 16    | 185.           | 7               |        | 5     | 12    |
| 134.           | 13              |        | 3     | 16    | 186.           | 2               |        | 10    | 12    |
| 135.           | 4               |        | 11    | 15    | 187.           | 5               |        | 7     | 12    |
| 136.           | 15              |        | —     | 15    | 188.           | 2               |        | 10    | 12    |
| 137.           | 5               |        | 10    | 15    | 189.           | 12              |        | —     | 12    |
| 138.           | 5               |        | 10    | 15    | 190.           | 2               |        | 10    | 12    |
| 139.           | 6               |        | 9     | 15    | 191.           | 6               |        | 6     | 12    |
| 140.           | 6               |        | 9     | 15    | 192.           | 2               |        | 10    | 12    |
| 141.           | 7               |        | 8     | 15    | 193.           | 1               |        | 11    | 12    |
| 142.           | 3               |        | 12    | 15    | 194.           | 5               |        | 7     | 12    |
| 143.           | 6               |        | 9     | 15    | 195.           | 5               |        | 7     | 12    |
| 144.           | 3               |        | 12    | 15    | 196.           | 4               |        | 7     | 11    |
| 145.           | 3               |        | 11    | 14    | 197.           | 5               |        | 6     | 11    |
| 146.           | 4               |        | 10    | 14    | 198.           | 5               |        | 6     | 11    |
| 147.           | 10              |        | 4     | 14    | 199.           | 4               |        | 7     | 11    |
| 148.           | 8               |        | 6     | 14    | 200.           | 4               |        | 7     | 11    |
| 149.           | 6               |        | 8     | 14    | 201.           | 4               |        | 7     | 11    |
| 150.           | 6               |        | 8     | 14    | 202.           | 5               |        | 6     | 11    |
| 151.           | 3               |        | 11    | 14    | 203.           | 5               |        | 6     | 11    |
| 152.           | 11              |        | 3     | 14    | 204.           | 3               |        | 8     | 11    |
| 153.           | 6               |        | 8     | 14    | 205.           | 5               |        | 6     | 11    |
| 154.           | 9               |        | 5     | 14    | 206.           | 6               |        | 5     | 11    |
| 155.           | 4               |        | 10    | 14    | 207.           | 3               |        | 8     | 11    |
| 156.           | 3               |        | 11    | 14    | 208.           | 7               |        | 4     | 11    |



TABLE 3

## NUMBER OF ESTABLISHMENTS AND LABORERS IN THE MACHINERY INDUSTRY

(Continued)

| ESTABLISHMENTS | NO. OF LABORERS |        |       |       | ESTABLISHMENTS | NO. OF LABORERS |        |       |       |
|----------------|-----------------|--------|-------|-------|----------------|-----------------|--------|-------|-------|
|                | MALE            | FEMALE | CHILD | TOTAL |                | MALE            | FEMALE | CHILD | TOTAL |
| No. 209.       | 3               |        | 8     | 11    | No. 262.       | 3               |        | 5     | 8     |
| 210.           | 2               |        | 9     | 11    | 263.           | 3               |        | 5     | 8     |
| 211.           | 6               |        | 5     | 11    | 264.           | 4               |        | 4     | 8     |
| 212.           | 5               |        | 6     | 11    | 265.           | 5               |        | 3     | 8     |
| 213.           | 10              |        | —     | 10    | 266.           | 4               |        | 4     | 8     |
| 214.           | 10              |        | —     | 10    | 267.           | 4               |        | 4     | 8     |
| 215.           | 10              |        | —     | 10    | 268.           | 3               |        | 5     | 8     |
| 216.           | 4               |        | 6     | 10    | 269.           | 4               |        | 4     | 8     |
| 217.           | 3               |        | 7     | 10    | 270.           | 4               |        | 4     | 8     |
| 218.           | 3               |        | 7     | 10    | 271.           | 1               |        | 7     | 8     |
| 219.           | 3               |        | 7     | 10    | 272.           | 3               |        | 5     | 8     |
| 220.           | 2               |        | 8     | 10    | 273.           | 5               |        | 3     | 8     |
| 221.           | 2               |        | 8     | 10    | 274.           | 4               |        | 4     | 8     |
| 222.           | 5               |        | 5     | 10    | 275.           | 2               |        | 6     | 8     |
| 223.           | 6               |        | 4     | 10    | 276.           | 4               |        | 4     | 8     |
| 224.           | 4               |        | 6     | 10    | 277.           | 2               |        | 6     | 8     |
| 225.           | 6               |        | 4     | 10    | 278.           | 4               |        | 4     | 8     |
| 226.           | 4               |        | 6     | 10    | 279.           | 2               |        | 6     | 8     |
| 227.           | 6               |        | 4     | 10    | 280.           | 3               |        | 5     | 8     |
| 228.           | 6               |        | 4     | 10    | 281.           | 4               |        | 4     | 8     |
| 229.           | 1               |        | 9     | 10    | 282.           | 2               |        | 6     | 8     |
| 230.           | 3               |        | 7     | 10    | 283.           | 5               |        | 2     | 7     |
| 231.           | 6               |        | 4     | 10    | 284.           | 1               |        | 6     | 7     |
| 232.           | 3               |        | 7     | 10    | 285.           | 1               |        | 6     | 7     |
| 233.           | 3               |        | 7     | 10    | 286.           | 3               |        | 4     | 7     |
| 234.           | 5               |        | 5     | 10    | 287.           | 3               |        | 4     | 7     |
| 235.           | 1               |        | 9     | 10    | 288.           | 2               |        | 5     | 7     |
| 236.           | 9               |        | —     | 9     | 289.           | 1               |        | 6     | 7     |
| 237.           | 9               |        | —     | 9     | 290.           | 3               |        | 4     | 7     |
| 238.           | 9               |        | —     | 9     | 291.           | —               |        | 7     | 7     |
| 239.           | 9               |        | —     | 9     | 292.           | 3               |        | 4     | 7     |
| 240.           | 5               |        | 4     | 9     | 293.           | 3               |        | 4     | 7     |
| 241.           | 6               |        | 3     | 9     | 294.           | 2               |        | 5     | 7     |
| 242.           | 4               |        | 5     | 9     | 295.           | 2               |        | 5     | 7     |
| 243.           | 4               |        | 5     | 9     | 296.           | 4               |        | 3     | 7     |
| 244.           | 5               |        | 4     | 9     | 297.           | 4               |        | 3     | 7     |
| 245.           | 6               |        | 3     | 9     | 298.           | 3               |        | 4     | 7     |
| 246.           | 5               |        | 4     | 9     | 299.           | 3               |        | 4     | 7     |
| 247.           | 3               |        | 6     | 9     | 300.           | 3               |        | 4     | 7     |
| 248.           | 4               |        | 5     | 9     | 301.           | 4               |        | 3     | 7     |
| 249.           | 5               |        | 4     | 9     | 302.           | 6               |        | 1     | 7     |
| 250.           | 3               |        | 6     | 9     | 303.           | 4               |        | 3     | 7     |
| 251.           | 4               |        | 5     | 9     | 304.           | 4               |        | 3     | 7     |
| 252.           | 6               |        | 3     | 9     | 305.           | 3               |        | 4     | 7     |
| 253.           | 2               |        | 7     | 9     | 306.           | 5               |        | 2     | 7     |
| 254.           | 9               |        | —     | 9     | 307.           | 4               |        | 3     | 7     |
| 255.           | 4               |        | 4     | 8     | 308.           | 3               |        | 4     | 7     |
| 256.           | 4               |        | 4     | 8     | 309.           | 3               |        | 4     | 7     |
| 257.           | 4               |        | 4     | 8     | 310.           | 5               |        | 2     | 7     |
| 258.           | 1               |        | 7     | 8     | 311.           | 2               |        | 5     | 7     |
| 259.           | 3               |        | 5     | 8     | 312.           | 3               |        | 4     | 7     |
| 260.           | 2               |        | 6     | 8     | 313.           | 2               |        | 5     | 7     |
| 261.           | 4               |        | 4     | 8     | 314.           | 3               |        | 4     | 7     |

TABLE 3  
 NUMBER OF ESTABLISHMENTS AND LABORERS IN THE MACHINERY INDUSTRY  
 (Continued)

| ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |       | ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |       |
|--------------------------|-----------------|--------|-------|-------|--------------------------|-----------------|--------|-------|-------|
|                          | MALE            | FEMALE | CHILD | TOTAL |                          | MALE            | FEMALE | CHILD | TOTAL |
| No. 315.                 | 4               |        | 3     | 7     | No. 369.                 | 1               |        | 4     | 5     |
| 316.                     | 3               |        | 4     | 7     | 370.                     | 2               |        | 3     | 5     |
| 317.                     | 5               |        | 2     | 7     | 371.                     | 3               |        | 2     | 5     |
| 318.                     | 1               |        | 6     | 7     | 372.                     | 1               |        | 4     | 5     |
| 319.                     | 4               |        | 3     | 7     | 373.                     | 2               |        | 3     | 5     |
| 320.                     | 3               |        | 4     | 7     | 374.                     | 2               |        | 3     | 5     |
| 321.                     | 4               |        | 3     | 7     | 375.                     | 1               |        | 4     | 5     |
| 322.                     | 2               |        | 4     | 6     | 376.                     | 3               |        | 2     | 5     |
| 323.                     | 2               |        | 4     | 6     | 377.                     | 2               |        | 3     | 5     |
| 324.                     | 3               |        | 3     | 6     | 378.                     | 1               |        | 4     | 5     |
| 325.                     | 2               |        | 4     | 6     | 379.                     | 1               |        | 3     | 4     |
| 326.                     | 2               |        | 4     | 6     | 380.                     | 1               |        | 3     | 4     |
| 327.                     | 4               |        | 2     | 6     | 381.                     | 2               |        | 2     | 4     |
| 328.                     | 2               |        | 4     | 6     | 382.                     | 2               |        | 2     | 4     |
| 329.                     | 3               |        | 3     | 6     | 383.                     | 3               |        | 1     | 4     |
| 330.                     | 2               |        | 4     | 6     | 384.                     | 4               |        | —     | 4     |
| 331.                     | 1               |        | 5     | 6     | 385.                     | 1               |        | 3     | 4     |
| 332.                     | 1               |        | 5     | 6     | 386.                     | 2               |        | 2     | 4     |
| 333.                     | 3               |        | 3     | 6     | 387.                     | 2               |        | 2     | 4     |
| 334.                     | 3               |        | 3     | 6     | 388.                     | 2               |        | 2     | 4     |
| 335.                     | 3               |        | 3     | 6     | 389.                     | —               |        | 4     | 4     |
| 336.                     | 3               |        | 3     | 6     | 390.                     | 2               |        | 2     | 4     |
| 337.                     | 2               |        | 4     | 6     | 391.                     | 2               |        | 2     | 4     |
| 338.                     | 3               |        | 3     | 6     | 392.                     | 2               |        | 2     | 4     |
| 339.                     | 3               |        | 3     | 6     | 393.                     | 2               |        | 2     | 4     |
| 340.                     | 6               |        | —     | 6     | 394.                     | 1               |        | 3     | 4     |
| 341.                     | 3               |        | 3     | 6     | 395.                     | 3               |        | 1     | 4     |
| 342.                     | 4               |        | 2     | 6     | 396.                     | 1               |        | 3     | 4     |
| 343.                     | 3               |        | 3     | 6     | 397.                     | 2               |        | 2     | 4     |
| 344.                     | 2               |        | 4     | 6     | 398.                     | 1               |        | 3     | 4     |
| 345.                     | 1               |        | 5     | 6     | 399.                     | 3               |        | 1     | 4     |
| 346.                     | 3               |        | 3     | 6     | 400.                     | 3               |        | —     | 3     |
| 347.                     | 2               |        | 4     | 6     | 401.                     | 1               |        | 2     | 3     |
| 348.                     | 1               |        | 5     | 6     | 402.                     | 2               |        | 1     | 3     |
| 349.                     | 2               |        | 4     | 6     | 403.                     | 2               |        | 1     | 3     |
| 350.                     | 3               |        | 3     | 6     | 404.                     | —               |        | 3     | 3     |
| 351.                     | —               |        | 6     | 6     | 405.                     | 2               |        | 1     | 3     |
| 352.                     | 3               |        | 2     | 5     | 406.                     | 2               |        | 1     | 3     |
| 353.                     | 2               |        | 3     | 5     | 407.                     | 2               |        | 1     | 3     |
| 354.                     | 2               |        | 3     | 5     | 408.                     | 2               |        | 1     | 3     |
| 355.                     | 1               |        | 4     | 5     | 409.                     | 2               |        | 1     | 3     |
| 356.                     | 2               |        | 3     | 5     | 410.                     | 1               |        | 2     | 3     |
| 357.                     | 2               |        | 3     | 5     | 411.                     | 1               |        | 2     | 3     |
| 358.                     | —               |        | 5     | 5     | 412.                     | —               |        | 2     | 2     |
| 359.                     | 3               |        | 2     | 5     | 413.                     | 1               |        | 1     | 2     |
| 360.                     | 1               |        | 4     | 5     | 414.                     | 2               |        | —     | 2     |
| 361.                     | 3               |        | 2     | 5     | 415.                     | 2               |        | —     | 2     |
| 362.                     | 3               |        | 2     | 5     | 416.                     | 1               |        | 1     | 2     |
| 363.                     | 4               |        | 1     | 5     | 417.                     | 1               |        | 1     | 2     |
| 364.                     | 2               |        | 3     | 5     | 418.                     | 1               |        | 1     | 2     |
| 365.                     | 2               |        | 3     | 5     |                          |                 |        |       |       |
| 366.                     | 2               |        | 3     | 5     |                          |                 |        |       |       |
| 367.                     | 1               |        | 4     | 5     |                          |                 |        |       |       |
| 368.                     | 2               |        | 3     | 5     |                          |                 |        |       |       |
|                          |                 |        |       |       | TOTAL                    | 5,834           |        | 2,978 | 8,812 |

SOURCES OF INFORMATION: REPORT OF THE COPPER AND IRON INDUSTRY  
EMPLOYERS' ASSOCIATION, WARD ROAD, SHANGHAI

|                                     |       |
|-------------------------------------|-------|
| No. of establishments investigated: | 418   |
| „ laborers                          | 8,812 |
| „ establishments estimated:         | 100   |
| „ laborers                          | 943   |
| Method of estimation:               |       |

The report of the Copper and Iron Industry Employers' Association shows only 180 machinery factories with no account regarding the number of laborers. As a result of the careful search made in August, 1929, the investigation covers 418 establishments and 8,812 laborers. Establishments of small size, situated in unfrequented quarters, are bound to be overlooked. It is estimated that at least 10 establishments with an average of 30 laborers, 13 with 8 laborers, and 77 with 7 laborers have been left out. The number of laborers estimated is, therefore, 943, of which 66% or 621 laborers are male workers and 34% or 322 are child workers. The establishments investigated and estimated, taken together, amount to 518. The total number of laborers investigated and estimated is 9,755, among them 6,455 are male workers and 3,300 child workers. These figures however do not include motor car repairers, whose work is similar in nature to that of laborers in machinery factories. Such workers are not organized, thus rendering investigation difficult.

TABLE 4

## NUMBER OF ESTABLISHMENTS AND LABORERS IN THE SHIP-BUILDING INDUSTRY

| ESTABLISHMENTS | NO. OF LABORERS |        |       |       | ESTABLISHMENTS | NO. OF LABORERS |        |       |       |
|----------------|-----------------|--------|-------|-------|----------------|-----------------|--------|-------|-------|
|                | MALE            | FEMALE | CHILD | TOTAL |                | MALE            | FEMALE | CHILD | TOTAL |
| No. 1.         | 3,291           |        | —     | 3,291 | No. 10.        | 56              |        | 19    | 75    |
| 2.             | 1,027           |        | 84    | 1,111 | 11.            | 28              |        | 15    | 43    |
| 3.             | 510             |        | 50    | 560   | 12.            | 12              |        | 9     | 21    |
| 4.             | 368             |        | —     | 368   | 13.            | 3               |        | 5     | 8     |
| 5.             | 220             |        | —     | 220   |                |                 |        |       |       |
| 6.             | 190             |        | —     | 190   |                |                 |        |       |       |
| 7.             | 150             |        | 35    | 185   |                |                 |        |       |       |
| 8.             | 84              |        | 12    | 96    |                |                 |        |       |       |
| 9.             | 55              |        | 25    | 80    | TOTAL          | 5,994           |        | 254   | 6,248 |

SOURCES OF INFORMATION: PERSONAL INQUIRY MADE BY AGENTS  
OF THE BUREAU IN AUGUST, 1929

No. of establishments investigated: 13  
 „ laborers „ 6,248

As the number of contract workers is constantly changing, the laborers investigated are limited to regular workers in the various establishments. The number of laborers in the ship-building industry is subject to seasonal variations and changes in business prosperity. Business boom comes in spring and summer, when work is abundant and temporary workers are employed. Autumn and winter, on the other hand, are slack seasons with a reduction in the number of laborers. The figures in the above table are indicative of the particular conditions in the month of August only.

TABLE 5

NUMBER OF ESTABLISHMENTS AND LABORERS IN THE GLASS  
MANUFACTURING INDUSTRY

| ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |       | ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |       |
|--------------------------|-----------------|--------|-------|-------|--------------------------|-----------------|--------|-------|-------|
|                          | MALE            | FEMALE | CHILD | TOTAL |                          | MALE            | FEMALE | CHILD | TOTAL |
| No. 1.                   | 205             |        | 103   | 308   | No. 18.                  | 27              |        | 40    | 67    |
| 2.                       | 125             |        | 142   | 267   | 19.                      | 43              |        | 23    | 66    |
| 3.                       | 176             |        | 87    | 263   | 20.                      | 49              |        | 15    | 64    |
| 4.                       | 91              |        | 84    | 175   | 21.                      | 33              |        | 30    | 63    |
| 5.                       | 65              |        | 95    | 160   | 22.                      | 34              |        | 27    | 61    |
| 6.                       | 59              |        | 70    | 129   | 23.                      | 20              |        | 26    | 46    |
| 7.                       | 67              |        | 58    | 125   | 24.                      | 19              |        | 27    | 46    |
| 8.                       | 64              |        | 59    | 123   | 25.                      | 28              |        | 17    | 45    |
| 9.                       | 66              |        | 57    | 123   | 26.                      | 24              |        | 19    | 43    |
| 10.                      | 56              |        | 62    | 118   | 27.                      | 20              |        | 23    | 43    |
| 11.                      | 42              |        | 63    | 105   | 28.                      | 20              |        | 15    | 41    |
| 12.                      | 48              |        | 55    | 103   | 29.                      | 17              |        | 16    | 33    |
| 13.                      | 39              |        | 57    | 96    | 30.                      | 15              |        | —     | 15    |
| 14.                      | 35              |        | 53    | 88    |                          |                 |        |       |       |
| 15.                      | 38              |        | 42    | 80    |                          |                 |        |       |       |
| 16.                      | 32              |        | 46    | 78    |                          |                 |        |       |       |
| 17.                      | 25              |        | 44    | 69    |                          |                 |        |       |       |
|                          |                 |        |       |       | Total                    | 1,588           |        | 1,455 | 3,043 |

SOURCES OF INFORMATION: PERSONAL INQUIRY MADE BY AGENTS  
OF THE BUREAU IN AUGUST 1929

No. of establishments investigated: 30  
 „ laborers „ 3,043

Cut-throat competition among rival establishments has resulted in the closing down of a number of factories in the glass manufacturing industry. Formerly, the total number of laborers in this industry amounted to more than 4,000. The present investigation shows only a little over 3,000 laborers.

TABLE 6

NUMBER OF ESTABLISHMENTS AND LABORERS IN THE  
SOAP MAKING INDUSTRY

| ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |       | ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |       |
|--------------------------|-----------------|--------|-------|-------|--------------------------|-----------------|--------|-------|-------|
|                          | MALE            | FEMALE | CHILD | TOTAL |                          | MALE            | FEMALE | CHILD | TOTAL |
| No. 1.                   | 386             | 65     |       | 451   | No. 21.                  | 6               | —      |       | 6     |
| 2.                       | 141             | 122    |       | 263   | 22.                      | 5               | —      |       | 5     |
| 3.                       | 17              | 46     |       | 63    | 23.                      | 5               | —      |       | 5     |
| 4.                       | 20              | 32     |       | 52    | 24.                      | 4               | —      |       | 4     |
| 5.                       | 11              | 27     |       | 38    | 25.                      | 4               | —      |       | 4     |
| 6.                       | 22              | 1      |       | 23    | 26.                      | 4               | —      |       | 4     |
| 7.                       | 22              | —      |       | 22    | 27.                      | 4               | —      |       | 4     |
| 8.                       | 19              | —      |       | 19    | 28.                      | 4               | —      |       | 4     |
| 9.                       | 12              | 6      |       | 18    | 29.                      | 3               | —      |       | 3     |
| 10.                      | 12              | 6      |       | 18    | 30.                      | 3               | —      |       | 3     |
| 11.                      | 13              | —      |       | 13    | 31.                      | 3               | —      |       | 3     |
| 12.                      | 12              | —      |       | 12    | 32.                      | 3               | —      |       | 3     |
| 13.                      | 8               | —      |       | 8     | 33.                      | 2               | —      |       | 2     |
| 14.                      | 8               | —      |       | 8     | 34.                      | 2               | —      |       | 2     |
| 15.                      | 8               | —      |       | 8     | 35.                      | 2               | —      |       | 2     |
| 16.                      | 7               | —      |       | 7     | 36.                      | 2               | —      |       | 2     |
| 17.                      | 7               | —      |       | 7     |                          |                 |        |       |       |
| 18.                      | 7               | —      |       | 7     |                          |                 |        |       |       |
| 19.                      | 6               | —      |       | 6     |                          |                 |        |       |       |
| 20.                      | 6               | —      |       | 6     |                          |                 |        |       |       |
|                          |                 |        |       |       | TOTAL                    | 800             | 305    |       | 1,105 |

SOURCES OF INFORMATION: PERSONAL INQUIRY MADE BY AGENTS  
OF THE BUREAU IN AUGUST 1929

No. of establishments investigated: 36

„ laborers „ 1,105

TABLE 7  
NUMBER OF ESTABLISHMENTS AND LABORERS IN THE  
MATCH MAKING INDUSTRY

| ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |       | ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |       |
|--------------------------|-----------------|--------|-------|-------|--------------------------|-----------------|--------|-------|-------|
|                          | MALE            | FEMALE | CHILD | TOTAL |                          | MALE            | FEMALE | CHILD | TOTAL |
| No. 1.                   | 340             | 370    | 210   | 920   | No. 6.                   | 60              | 40     | 20    | 120   |
| 2.                       | 164             | 380    | 110   | 654   | 7.                       | 45              | 30     | 20    | 95    |
| 3.                       | 135             | 200    | 80    | 415   |                          |                 |        |       |       |
| 4.                       | 80              | 140    | 60    | 280   |                          |                 |        |       |       |
| 5.                       | 87              | 72     | 53    | 212   | TOTAL                    | 911             | 1,232  | 553   | 2,696 |

SOURCES OF INFORMATION: PERSONAL INQUIRY MADE BY AGENTS  
OF THE BUREAU IN AUGUST 1929

No. of establishments investigated: 7  
,, laborers ,, 2,696

Among the seven match factories investigated, the second one (Chung Hwa Match Factory) is situated in the district of Chow P'u, which though included in the city of Greater Shanghai has not yet been formally taken over by the City Government. But, as the said factory is one of the biggest match manufacturing plants in this city and has been continually supplying the Bureau with wage data, it is therefore included in the present investigation.

TABLE 8

NUMBER OF ESTABLISHMENTS AND LABORERS IN THE ENAMEL INDUSTRY

| ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |       | ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |       |
|--------------------------|-----------------|--------|-------|-------|--------------------------|-----------------|--------|-------|-------|
|                          | MALE            | FEMALE | CHILD | TOTAL |                          | MALE            | FEMALE | CHILD | TOTAL |
| No. 1.                   | 354             | 107    | 20    | 481   | No. 11.                  | 50              | —      | —     | 50    |
| 2.                       | 345             | 66     | 42    | 453   | 12.                      | 36              | 10     | —     | 46    |
| 3.                       | 320             | 80     | —     | 400   | 13.                      | 30              | —      | —     | 30    |
| 4.                       | 208             | 30     | 28    | 266   | 14.                      | 28              | —      | —     | 28    |
| 5.                       | 127             | 25     | —     | 152   | 15.                      | 18              | —      | —     | 18    |
| 6.                       | 90              | —      | —     | 90    | 16.                      | 5               | —      | —     | 5     |
| 7.                       | 70              | 15     | —     | 85    |                          |                 |        |       |       |
| 8.                       | 61              | 20     | —     | 81    |                          |                 |        |       |       |
| 9.                       | 60              | —      | —     | 60    |                          |                 |        |       |       |
| 10.                      | 55              | —      | —     | 55    | TOTAL                    | 1,857           | 353    | 90    | 2,300 |

SOURCES OF INFORMATION: PERSONAL INQUIRY MADE BY AGENTS  
OF THE BUREAU IN AUGUST 1929

No. of establishments investigated: 16  
 „ laborers „ 2,300



TABLE 9

## NUMBER OF ESTABLISHMENTS AND LABORERS IN THE SILK REELING INDUSTRY

| ESTABLISHMENTS | NO. OF BASINS | NO. OF REGULAR WORKERS IN THE REELING ROOM | NO. OF CHILD WORKERS IN THE REELING ROOM | TOTAL NO. OF WORKERS IN THE REELING ROOM | ESTABLISHMENTS | NO. OF BASINS | NO. OF REGULAR WORKERS IN THE REELING ROOM | NO. OF CHILD WORKERS IN THE REELING ROOM | TOTAL NO. OF WORKERS IN THE REELING ROOM |
|----------------|---------------|--------------------------------------------|------------------------------------------|------------------------------------------|----------------|---------------|--------------------------------------------|------------------------------------------|------------------------------------------|
| No. 1.         | 628           | 628                                        | 314                                      | 942                                      | No. 51.        | 216           | 216                                        | 108                                      | 324                                      |
| 2.             | 600           | 600                                        | 300                                      | 900                                      | 52.            | 212           | 212                                        | 106                                      | 318                                      |
| 3.             | 542           | 542                                        | 271                                      | 813                                      | 53.            | 212           | 212                                        | 106                                      | 318                                      |
| 4.             | 536           | 536                                        | 268                                      | 804                                      | 54.            | 208           | 208                                        | 104                                      | 312                                      |
| 5.             | 512           | 512                                        | 256                                      | 768                                      | 55.            | 208           | 208                                        | 104                                      | 312                                      |
| 6.             | 432           | 432                                        | 216                                      | 648                                      | 56.            | 208           | 208                                        | 104                                      | 312                                      |
| 7.             | 416           | 416                                        | 208                                      | 624                                      | 57.            | 208           | 208                                        | 104                                      | 312                                      |
| 8.             | 416           | 416                                        | 208                                      | 624                                      | 58.            | 208           | 208                                        | 104                                      | 312                                      |
| 9.             | 352           | 352                                        | 176                                      | 528                                      | 59.            | 208           | 208                                        | 104                                      | 312                                      |
| 10.            | 350           | 350                                        | 175                                      | 525                                      | 60.            | 208           | 208                                        | 104                                      | 312                                      |
| 11.            | 344           | 344                                        | 172                                      | 516                                      | 61.            | 208           | 208                                        | 104                                      | 312                                      |
| 12.            | 338           | 338                                        | 169                                      | 507                                      | 62.            | 208           | 208                                        | 104                                      | 312                                      |
| 13.            | 318           | 318                                        | 159                                      | 477                                      | 63.            | 208           | 208                                        | 104                                      | 312                                      |
| 14.            | 288           | 288                                        | 144                                      | 432                                      | 64.            | 208           | 208                                        | 104                                      | 312                                      |
| 15.            | 280           | 280                                        | 140                                      | 420                                      | 65.            | 208           | 208                                        | 104                                      | 312                                      |
| 16.            | 264           | 264                                        | 132                                      | 396                                      | 66.            | 208           | 208                                        | 104                                      | 312                                      |
| 17.            | 260           | 260                                        | 130                                      | 390                                      | 67.            | 208           | 208                                        | 104                                      | 312                                      |
| 18.            | 260           | 260                                        | 130                                      | 390                                      | 68.            | 208           | 208                                        | 104                                      | 312                                      |
| 19.            | 260           | 260                                        | 130                                      | 390                                      | 69.            | 208           | 208                                        | 104                                      | 312                                      |
| 20.            | 256           | 256                                        | 128                                      | 384                                      | 70.            | 208           | 208                                        | 104                                      | 312                                      |
| 21.            | 248           | 248                                        | 124                                      | 372                                      | 71.            | 208           | 208                                        | 104                                      | 312                                      |
| 22.            | 240           | 240                                        | 120                                      | 360                                      | 72.            | 208           | 208                                        | 104                                      | 312                                      |
| 23.            | 240           | 240                                        | 120                                      | 360                                      | 73.            | 204           | 204                                        | 102                                      | 306                                      |
| 24.            | 240           | 240                                        | 120                                      | 360                                      | 74.            | 200           | 200                                        | 100                                      | 300                                      |
| 25.            | 240           | 240                                        | 120                                      | 360                                      | 75.            | 200           | 200                                        | 100                                      | 300                                      |
| 26.            | 240           | 240                                        | 120                                      | 360                                      | 76.            | 200           | 200                                        | 100                                      | 300                                      |
| 27.            | 240           | 240                                        | 120                                      | 360                                      | 77.            | 200           | 200                                        | 100                                      | 300                                      |
| 28.            | 240           | 240                                        | 120                                      | 360                                      | 78.            | 200           | 200                                        | 100                                      | 300                                      |
| 29.            | 240           | 240                                        | 120                                      | 360                                      | 79.            | 200           | 200                                        | 100                                      | 300                                      |
| 30.            | 240           | 240                                        | 120                                      | 360                                      | 80.            | 194           | 194                                        | 97                                       | 291                                      |
| 31.            | 240           | 240                                        | 120                                      | 360                                      | 81.            | 192           | 192                                        | 96                                       | 288                                      |
| 32.            | 240           | 240                                        | 120                                      | 360                                      | 82.            | 192           | 192                                        | 96                                       | 288                                      |
| 33.            | 240           | 240                                        | 120                                      | 360                                      | 83.            | 192           | 192                                        | 96                                       | 288                                      |
| 34.            | 240           | 240                                        | 120                                      | 360                                      | 84.            | 184           | 184                                        | 92                                       | 276                                      |
| 35.            | 240           | 240                                        | 120                                      | 360                                      | 85.            | 184           | 184                                        | 92                                       | 276                                      |
| 36.            | 240           | 240                                        | 120                                      | 360                                      | 86.            | 184           | 184                                        | 92                                       | 276                                      |
| 37.            | 238           | 238                                        | 119                                      | 357                                      | 87.            | 170           | 170                                        | 85                                       | 255                                      |
| 38.            | 236           | 236                                        | 118                                      | 354                                      | 88.            | 160           | 160                                        | 80                                       | 240                                      |
| 39.            | 234           | 234                                        | 117                                      | 351                                      | 89.            | 160           | 160                                        | 80                                       | 240                                      |
| 40.            | 234           | 234                                        | 117                                      | 351                                      | 90.            | 160           | 160                                        | 80                                       | 240                                      |
| 41.            | 230           | 230                                        | 115                                      | 345                                      | 91.            | 160           | 160                                        | 80                                       | 240                                      |
| 42.            | 228           | 228                                        | 114                                      | 342                                      | 92.            | 160           | 160                                        | 80                                       | 240                                      |
| 43.            | 228           | 228                                        | 114                                      | 342                                      | 93.            | 158           | 158                                        | 79                                       | 237                                      |
| 44.            | 224           | 224                                        | 112                                      | 336                                      | 94.            | 150           | 150                                        | 75                                       | 225                                      |
| 45.            | 224           | 224                                        | 112                                      | 336                                      | 95.            | 144           | 144                                        | 72                                       | 216                                      |
| 46.            | 224           | 224                                        | 112                                      | 336                                      | 96.            | 144           | 144                                        | 72                                       | 216                                      |
| 47.            | 224           | 224                                        | 112                                      | 336                                      | 97.            | 140           | 140                                        | 70                                       | 210                                      |
| 48.            | 220           | 220                                        | 110                                      | 330                                      | 98.            | 140           | 140                                        | 70                                       | 210                                      |
| 49.            | 216           | 216                                        | 108                                      | 324                                      | 99.            | 140           | 140                                        | 70                                       | 210                                      |
| 50.            | 216           | 216                                        | 108                                      | 324                                      | 100.           | 136           | 136                                        | 68                                       | 204                                      |

TABLE 9  
NUMBER OF ESTABLISHMENTS AND LABORERS IN THE SILK REELING  
INDUSTRY (Continued)

| ESTABLISHMENTS | NO. OF BASINS | NO. OF REGULAR WORKERS IN THE REELING ROOM | NO. OF CHILD WORKERS IN THE REELING ROOM | TOTAL NO. OF WORKERS IN THE REELING ROOM | ESTABLISHMENTS | NO. OF BASINS | NO. OF REGULAR WORKERS IN THE REELING ROOM | NO. OF CHILD WORKERS IN THE REELING ROOM | TOTAL NO. OF WORKERS IN THE REELING ROOM |
|----------------|---------------|--------------------------------------------|------------------------------------------|------------------------------------------|----------------|---------------|--------------------------------------------|------------------------------------------|------------------------------------------|
| No. 101.       | 136           | 136                                        | 68                                       | 204                                      | No. 106.       | 100           | 100                                        | 50                                       | 150                                      |
| 102.           | 128           | 128                                        | 64                                       | 192                                      | 107.           | 70            | 70                                         | 35                                       | 105                                      |
| 103.           | 128           | 128                                        | 64                                       | 192                                      |                |               |                                            |                                          |                                          |
| 104.           | 120           | 120                                        | 60                                       | 180                                      |                |               |                                            |                                          |                                          |
| 105.           | 108           | 108                                        | 54                                       | 162                                      | TOTAL          | 24,906        | 24,906                                     | 12,453                                   | 37,359                                   |

SOURCES OF INFORMATION: INVESTIGATION CONDUCTED BY THE SHANGHAI SILK FILATURES EMPLOYERS' ASSOCIATION, NORTH SHANSI ROAD, IN MAY 1929. CHECKED BY AGENTS OF THE BUREAU IN AUGUST 1929

No. of establishments investigated: 107

„ basins in the above establishments: 24,906

Method of estimation:

The list submitted by the Shanghai Silk Filatures Employers' Association gives the number of establishments and that of basins only. The number of laborers in the various departments of the filatures are estimated.

As a rule, for every two basins, two female workers and one child worker are employed. Thus, 24,906 basins would require 24,906 female workers and 12,453 child workers at work in the reeling rooms of the various filatures. The average number of laborers in other departments of a filature are estimated as follows:

| Department                                 | Average No. of laborers |
|--------------------------------------------|-------------------------|
| Sorting . . . . .                          | 15                      |
| Cocoon peeling . . . . .                   | 30                      |
| Reeling (substitute workers only). . . . . | 40                      |
| Silk waste preparing . . . . .             | 15                      |
| Finishing. . . . .                         | 15                      |
| Mechanics and coolies . . . . .            | 16                      |

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All laborers except mechanists and coolies are female workers. The total number of laborers in sorting, silk waste preparing, and finishing departments of the various filatures is figured at 1,605 female workers each; that in cocoon peeling department, 3,210 female workers; reeling department (substitute workers only), 4,280; and that of mechanics and coolies 1,712 male workers. These and the laborers in the reeling department of the 107 filatures taken together amount to 51,376 laborers, of which 1,712 are males, 37,211 females, and 12,453 child workers.

TABLE 10  
NUMBER OF ESTABLISHMENTS AND LABORERS IN THE  
COTTON SPINNING INDUSTRY

| ESTABLISHMENTS          | ORIGINAL NO. OF WORKERS <sup>1</sup> | NO. OF WEAVERS <sup>2</sup> | ACTUAL NO. OF WORKERS <sup>3</sup> | ESTABLISHMENTS          | ORIGINAL NO. OF WORKERS <sup>1</sup> | NO. OF WEAVERS <sup>2</sup> | ACTUAL NO. OF WORKERS <sup>3</sup> |
|-------------------------|--------------------------------------|-----------------------------|------------------------------------|-------------------------|--------------------------------------|-----------------------------|------------------------------------|
| Chinese Establishments  |                                      |                             |                                    | Japanese Establishments |                                      |                             |                                    |
| No. 1.                  | 4,000                                | —                           | 4,000                              | No. 36. }               |                                      |                             |                                    |
| 2.                      | 3,700                                | —                           | 3,700                              | 37. }                   | 3,070                                | —                           | 3,070                              |
| 3.                      | 3,740                                | 240                         | 3,500                              | 38. }                   |                                      |                             |                                    |
| 4.                      | 4,604                                | 1,110                       | 3,494                              | 39. }                   | 3,542                                | 500                         | 3,042                              |
| 5.                      | 4,315                                | 920                         | 3,395                              | 40.                     | 3,900                                | 960                         | 2,940                              |
| 6.                      | 4,200                                | 1,000                       | 3,200                              | 41.                     | 2,621                                | —                           | 2,621                              |
| 7.                      | 3,747                                | 612                         | 3,135                              | 42.                     | 2,300                                | —                           | 2,300                              |
| 8.                      | 3,144                                | 446                         | 2,698                              | 43.                     | 2,000                                | —                           | 2,000                              |
| 9.                      | 2,400                                | —                           | 2,400                              | 44. }                   |                                      |                             |                                    |
| 10.                     | 3,400                                | 1,070                       | 2,330                              | 45. }                   | 1,800                                | —                           | 1,800                              |
| 11.                     | 2,300                                | —                           | 2,300                              | 46.                     | 1,670                                | —                           | 1,670                              |
| 12.                     | 2,277                                | 216                         | 2,061                              | 47.                     | 1,400                                | —                           | 1,400                              |
| 13.                     | 2,180                                | 224                         | 1,956                              | 48.                     | 1,866                                | 664                         | 1,202                              |
| 14.                     | 1,642                                | —                           | 1,642                              | 49.                     | 1,100                                | —                           | 1,100                              |
| 15.                     | 1,557                                | —                           | 1,557                              | 50.                     | 1,616                                | 582                         | 1,034                              |
| 16.                     | 1,280                                | —                           | 1,280                              | 51.                     | 2,043                                | 1,126                       | 917                                |
| 17.                     | 1,196                                | —                           | 1,196                              | 52.                     | 900                                  | —                           | 900                                |
| 18.                     | 1,110                                | —                           | 1,110                              | 53.                     | 900                                  | —                           | 900                                |
| 19.                     | 1,000                                | —                           | 1,000                              | 54.                     | 750                                  | —                           | 750                                |
| 20.                     | 970                                  | —                           | 970                                | 55.                     | 700                                  | —                           | 700                                |
| 21.                     | 720                                  | —                           | 720                                | 56.                     | 1,400                                | 800                         | 600                                |
| 22.                     | 700                                  | —                           | 700                                | 57.                     | 470                                  | —                           | 470                                |
| 23.                     | 1,129                                | 500                         | 629                                | 58.                     | 930                                  | 800                         | 130                                |
| 24.                     | 564                                  | —                           | 564                                |                         |                                      |                             |                                    |
| 25.                     | 400                                  | —                           | 400                                |                         | 58,029                               | 8,484                       | 49,545                             |
| 26.                     | 300                                  | —                           | 300                                |                         |                                      |                             |                                    |
| 27. <sup>4</sup>        | —                                    | —                           | —                                  | British Establishments  |                                      |                             |                                    |
| 28. <sup>4</sup>        | —                                    | —                           | —                                  | No. 59. }               |                                      |                             |                                    |
|                         | 56,575                               | 6,338                       | 50,237                             | 60. }                   | 13,000                               | 1,900                       | 11,100                             |
|                         |                                      |                             |                                    | 61. }                   |                                      |                             |                                    |
| Japanese Establishments |                                      |                             |                                    |                         |                                      |                             |                                    |
| No. 29. }               |                                      |                             |                                    |                         |                                      |                             |                                    |
| 30. }                   | 5,560                                | —                           | 5,560                              |                         |                                      |                             |                                    |
| 31.                     | 3,963                                | —                           | 3,963                              |                         | 13,000                               | 1,900                       | 11,100                             |
| 32.                     | 3,799                                | —                           | 3,799                              |                         |                                      |                             |                                    |
| 33. }                   |                                      |                             |                                    |                         | 13,000                               | 1,900                       | 11,100                             |
| 34. }                   | 5,600                                | 2,000                       | 3,600                              |                         |                                      |                             |                                    |
| 35.                     | 4,129                                | 1,052                       | 3,077                              |                         |                                      |                             |                                    |
|                         |                                      |                             |                                    | TOTAL                   | 127,604                              | 16,722                      | 110,882                            |

The above data were gathered from the List of Chinese Cotton Mills, 9th revised edition, prepared by the Chinese Cotton Mills Employers' Association, 80 Avenue Edward VII, in the spring of 1930. Figures were checked by agents of the Bureau in May 1930.

The number of laborers in the 61 cotton mills in Shanghai as investigated by the Chinese Cotton Mills Employers' Association are as follows:

|                                  |                         |
|----------------------------------|-------------------------|
| Chinese establishments . . . .   | 56,575 laborers         |
| Japanese       ,,       . . . .  | 58,029       ,,         |
| British         ,,       . . . . | 13,000       ,,         |
| Total . . . . .                  | <u>127,604 laborers</u> |
| (Weavers excluded)               |                         |

According to the practice of the Bureau, weavers are put under the cotton weaving industry. The number of laborers in cotton mills should therefore be reduced by 16,722 laborers. It is assumed that one weaver is in charge of one loom. The number of looms in the establishments of various nationalities are as follows:

|                                  | No. of looms                                                              |
|----------------------------------|---------------------------------------------------------------------------|
| Chinese establishments . . . .   | 6,338                                                                     |
| Japanese       ,,       . . . .  | 8,484 (336 automatic<br>looms, which are<br>self-operating,<br>excluded.) |
| British         ,,       . . . . | 1,900                                                                     |
| Total . . . . .                  | <u>16,722</u>                                                             |

Deducting the weavers in the establishments of the respective nationalities, the number of laborers in cotton mills as figured out by the Bureau is as follows:

|                                  |                         |
|----------------------------------|-------------------------|
| Chinese establishments . . . .   | 50,237 laborers         |
| Japanese       ,,       . . . .  | 49,545       ,,         |
| British         ,,       . . . . | 11,100       ,,         |
| Total . . . . .                  | <u>110,882 laborers</u> |

In an investigation of 19 mills conducted by the Bureau on September 25, 1929, wage rate data were collected for 7,558 male workers, 27,574 female workers, and 1,161 child workers, making a total of 36,293 laborers. The percentage of male, female, and child workers are respectively 20.8, 76, and 3.2. According to this ratio, the distribution of the whole labor force in the cotton spinning industry among male, female, and child workers is as follows:

|                          | No of laborers |
|--------------------------|----------------|
| Male workers . . . . .   | 23,064         |
| Female workers . . . . . | 84,270         |
| Child workers . . . . .  | <u>3,548</u>   |
| Total . . . . .          | 110,882        |

It would be useful to indicate here the number of "spinning spindles" and "doubling spindles" in the cotton mills as follows:

|                         | No. of spinning<br>spindles | No. of doubling<br>spindles |
|-------------------------|-----------------------------|-----------------------------|
| Chinese establishments: | 918,098                     | 43,688                      |
| Japanese       ,,       | 1,054,344                   | 178,304                     |
| British         ,,      | <u>153,320</u>              | <u>1,900</u>                |
| <b>Total</b>            | <b>2,125,762</b>            | <b>223,892</b>              |

<sup>1</sup>The original number of workers are based upon the figures in the List of Chinese Cotton Mills, 9th revised edition, prepared by the Chinese Cotton Mills Employers' Association in the spring of 1930.

<sup>2</sup>The number of weavers are based upon the number of looms in the same list. Each loom is operated by one laborer.

<sup>3</sup>The actual number of workers are obtained by subtracting the number of weavers from the original number of workers.

<sup>4</sup>Under organization. Number of laborers unknown.

**TABLE II**  
**NUMBER OF ESTABLISHMENTS AND LABORERS IN THE**  
**SILK WEAVING INDUSTRY**

| ESTABLISHMENTS | NO. OF LABORERS |        |       |       | ESTABLISHMENTS | NO. OF LABORERS |        |       |       |
|----------------|-----------------|--------|-------|-------|----------------|-----------------|--------|-------|-------|
|                | MALE            | FEMALE | CHILD | TOTAL |                | MALE            | FEMALE | CHILD | TOTAL |
| No. 1.         | 295             | 271    |       | 566   | No. 27.        | 30              | 5      |       | 35    |
| 2.             | 128             | 146    |       | 274   | 28.            | 28              | 7      |       | 35    |
| 3.             | 102             | 50     |       | 152   | 29.            | 26              | 8      |       | 34    |
| 4.             | 113             | 38     |       | 151   | 30.            | 23              | 11     |       | 34    |
| 5.             | 109             | 23     |       | 132   | 31.            | 26              | 7      |       | 33    |
| 6.             | 102             | 29     |       | 131   | 32.            | 23              | 9      |       | 32    |
| 7.             | 94              | 37     |       | 131   | 33.            | 20              | 10     |       | 30    |
| 8.             | 94              | 36     |       | 130   | 34.            | 21              | 9      |       | 30    |
| 9.             | 104             | 8      |       | 112   | 35.            | 22              | 8      |       | 30    |
| 10.            | 76              | 27     |       | 103   | 36.            | 18              | 9      |       | 27    |
| 11.            | 54              | 44     |       | 98    | 37.            | 25              | 2      |       | 27    |
| 12.            | 83              | 14     |       | 97    | 38.            | 19              | 7      |       | 26    |
| 13.            | 59              | 25     |       | 84    | 39.            | 17              | 6      |       | 23    |
| 14.            | 49              | 22     |       | 71    | 40.            | 20              | 3      |       | 23    |
| 15.            | 68              | 1      |       | 69    | 41.            | 20              | 2      |       | 22    |
| 16.            | 26              | 41     |       | 67    | 42.            | 14              | 7      |       | 21    |
| 17.            | 9               | 55     |       | 64    | 43.            | 8               | 8      |       | 16    |
| 18.            | 47              | 17     |       | 64    | 44.            | 8               | 7      |       | 15    |
| 19.            | 40              | 10     |       | 50    | 45.            | 11              | 3      |       | 14    |
| 20.            | 32              | 15     |       | 47    | 46.            | 9               | 2      |       | 11    |
| 21.            | 35              | 12     |       | 47    | 47.            | 10              | 1      |       | 11    |
| 22.            | 37              | 8      |       | 45    | 48.            | 9               | 1      |       | 10    |
| 23.            | 35              | 9      |       | 44    |                |                 |        |       |       |
| 24.            | 32              | 11     |       | 43    |                |                 |        |       |       |
| 25.            | 28              | 13     |       | 41    |                |                 |        |       |       |
| 26.            | 25              | 15     |       | 40    |                |                 |        |       |       |
|                |                 |        |       |       | TOTAL          | 2,283           | 1,109  |       | 3,392 |

SOURCES OF INFORMATION: INVESTIGATION MADE BY THE SILK WEAVING  
EMPLOYERS' ASSOCIATION, 100 PEKING ROAD, CHECKED BY THE  
AGENTS OF THE BUREAU IN AUGUST 1929

No of establishments investigated: 48  
,, laborers ,, 3,392  
,, establishments estimated: 20  
,, laborers ,, 400  
Method of estimation:

The investigation made by the Silk Weaving Employers' Association is limited to member establishments of the association. It is estimated that the number of

non-member establishments amount to 20, which are mostly of small scale with about 20 laborers each. The total number of laborers in these establishments is therefore estimated at 400, of which 70% are male workers and 30% female workers. The total number of establishments investigated and estimated are 68, with a labor force amounts to 3,792 laborers, of which 2,563 are male and 1,229 female workers.



TABLE 12  
NUMBER OF ESTABLISHMENTS AND LABORERS IN THE  
COTTON WEAVING INDUSTRY

| ESTABLISHMENTS | NO. OF LABORERS |        |       |       | ESTABLISHMENTS | NO. OF LABORERS |        |       |       |
|----------------|-----------------|--------|-------|-------|----------------|-----------------|--------|-------|-------|
|                | MALE            | FEMALE | CHILD | TOTAL |                | MALE            | FEMALE | CHILD | TOTAL |
| No. 1.         | 990             | —      | 204   | 1,194 | No. 49.        | 21              | 20     | —     | 41    |
| 2.             | 329             | 230    | 21    | 580   | 50.            | 17              | 24     | —     | 41    |
| 3.             | 202             | 127    | —     | 329   | 51.            | 13              | 27     | —     | 40    |
| 4.             | 10              | 280    | —     | 290   | 52.            | —               | 40     | —     | 40    |
| 5.             | 86              | 140    | —     | 226   | 53.            | 2               | 36     | —     | 38    |
| 6.             | 70              | 136    | —     | 206   | 54.            | 12              | 25     | —     | 37    |
| 7.             | 40              | 160    | —     | 200   | 55.            | 2               | 35     | —     | 37    |
| 8.             | 8               | 186    | —     | 194   | 56.            | 22              | 15     | —     | 37    |
| 9.             | 101             | 78     | —     | 179   | 57.            | 3               | 34     | —     | 37    |
| 10.            | 24              | 143    | —     | 167   | 58.            | 24              | 13     | —     | 37    |
| 11.            | —               | 163    | —     | 163   | 59.            | 22              | 14     | —     | 36    |
| 12.            | 65              | 98     | —     | 163   | 60.            | 3               | 32     | —     | 35    |
| 13.            | 94              | 59     | —     | 153   | 61.            | 8               | 25     | —     | 33    |
| 14.            | 103             | 43     | —     | 146   | 62.            | 21              | 10     | —     | 31    |
| 15.            | 8               | 133    | —     | 141   | 63.            | 21              | 7      | —     | 28    |
| 16.            | 68              | 68     | —     | 136   | 64.            | 15              | 13     | —     | 28    |
| 17.            | 107             | —      | 27    | 134   | 65.            | 8               | 14     | 6     | 28    |
| 18.            | 49              | 83     | —     | 132   | 66.            | 2               | 26     | —     | 28    |
| 19.            | 85              | 45     | —     | 130   | 67.            | 20              | 7      | —     | 27    |
| 20.            | 39              | 70     | —     | 109   | 68.            | —               | 25     | —     | 25    |
| 21.            | 36              | 71     | —     | 107   | 69.            | 8               | 15     | —     | 23    |
| 22.            | 63              | 34     | —     | 97    | 70.            | 11              | 12     | —     | 23    |
| 23.            | 24              | 70     | —     | 94    | 71.            | 15              | 7      | —     | 22    |
| 24.            | 10              | 80     | —     | 90    | 72.            | 1               | 20     | —     | 21    |
| 25.            | 5               | 84     | —     | 89    | 73.            | 11              | 10     | —     | 21    |
| 26.            | 45              | 43     | —     | 88    | 74.            | 15              | 6      | —     | 21    |
| 27.            | 8               | 74     | —     | 82    | 75.            | 10              | 10     | —     | 20    |
| 28.            | 52              | 30     | —     | 82    | 76.            | 4               | 16     | —     | 20    |
| 29.            | 28              | 53     | —     | 81    | 77.            | 13              | 6      | —     | 19    |
| 30.            | 2               | 79     | —     | 81    | 78.            | 14              | 5      | —     | 19    |
| 31.            | 20              | 47     | 11    | 78    | 79.            | 10              | —      | 5     | 15    |
| 32.            | 2               | 74     | —     | 76    | 80.            | 11              | —      | 3     | 14    |
| 33.            | 7               | 60     | —     | 67    | 81.            | 10              | —      | 4     | 14    |
| 34.            | 43              | 20     | —     | 63    | 82.            | 7               | 7      | —     | 14    |
| 35.            | 31              | 30     | —     | 61    | 83.            | 6               | 8      | —     | 14    |
| 36.            | 9               | 50     | —     | 59    | 84.            | 1               | 12     | —     | 13    |
| 37.            | 19              | 39     | —     | 58    | 85.            | 8               | 4      | —     | 12    |
| 38.            | 30              | 27     | —     | 57    | 86.            | 5               | 7      | —     | 12    |
| 39.            | 4               | 52     | —     | 56    | 87.            | 6               | 6      | —     | 12    |
| 40.            | 13              | 43     | —     | 56    | 88.            | 6               | —      | 5     | 11    |
| 41.            | 17              | 36     | —     | 53    | 89.            | 8               | —      | 3     | 11    |
| 42.            | 29              | 24     | —     | 53    | 90.            | 10              | —      | —     | 10    |
| 43.            | 29              | 20     | —     | 49    | 91.            | 6               | 3      | —     | 9     |
| 44.            | 16              | 32     | —     | 48    | 92.            | 6               | 2      | —     | 8     |
| 45.            | 2               | 43     | —     | 45    | 93.            | 4               | 4      | —     | 8     |
| 46.            | —               | 45     | —     | 45    | 94.            | 6               | 2      | —     | 8     |
| 47.            | 3               | 39     | —     | 42    | 95.            | 8               | —      | —     | 8     |
| 48.            | 29              | 12     | —     | 41    | 96.            | 5               | —      | 3     | 8     |

TABLE 12  
 NUMBER OF ESTABLISHMENTS AND LABORERS IN THE  
 COTTON WEAVING INDUSTRY (*Continued*)

| ESTABLISHMENTS | NO. OF LABORERS |        |       |       | ESTABLISHMENTS | NO. OF LABORERS |        |       |       |
|----------------|-----------------|--------|-------|-------|----------------|-----------------|--------|-------|-------|
|                | MALE            | FEMALE | CHILD | TOTAL |                | MALE            | FEMALE | CHILD | TOTAL |
| No. 97.        | 6               | 2      | —     | 8     | No. 103.       | —               | —      | 6     | 6     |
| 98.            | 5               | 2      | —     | 7     | 104.           | 1               | 5      | —     | 6     |
| 99.            | 7               | —      | —     | 7     | 105.           | —               | —      | 5     | 5     |
| 100.           | 5               | 2      | —     | 7     |                |                 |        |       |       |
| 101.           | 6               | —      | —     | 6     |                |                 |        |       |       |
| 102.           | 2               | 4      | —     | 6     | TOTAL          | 3,547           | 4,172  | 303   | 8,022 |

SOURCES OF INFORMATION: PERSONAL INQUIRY MADE BY AGENTS  
 OF THE BUREAU IN AUGUST 1929

No. of establishments investigated: 105  
 „ laborers „ 8,022

Beside the 105 cotton weaving factories as given above, there are, according to the estimation of the Native Cloth Manufacturers' Association, about 300 establishments scattered over all parts of the city, but no knowledge regarding their names and location is available. It is estimated that these 300 establishments install about 3,000 looms. Each loom requires one and one-half laborers. Thus the total number of laborers is figured at 4,500, with 3,000 male and 1,500 female workers.

A number of the cotton mills in this city have weaving departments. According to the investigation of the Chinese Cotton Mills Employers' Association, there are 16,722 looms installed in cotton spinning factories in this city, and each loom is operated by one female worker. (See note under Table 10.)

The number of cotton weaving factories investigated and estimated, taken together, amount to 405 establishments.<sup>1</sup> The total number of laborers in those establishments plus the number of weavers in cotton mills amount to 29,244, (cotton weaving workers investigated, 8,022; workers estimated, 4,500; weavers in cotton mills 16,722) among them 6,547 are males, 22,394 females and 303 child workers.

<sup>1</sup>The weaving departments in cotton mills not counted as individual establishments.

TABLE 13

NUMBER OF ESTABLISHMENTS AND LABORERS IN THE SILK AND  
COTTON KNITTING INDUSTRY

| ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |       | ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |       |
|--------------------------|-----------------|--------|-------|-------|--------------------------|-----------------|--------|-------|-------|
|                          | MALE            | FEMALE | CHILD | TOTAL |                          | MALE            | FEMALE | CHILD | TOTAL |
| No. 1.                   | 146             | 536    | —     | 682   | No. 49.                  | 12              | 35     | 3     | 50    |
| 2.                       | 184             | 280    | —     | 464   | 50.                      | 3               | 40     | 5     | 48    |
| 3.                       | 104             | 280    | —     | 384   | 51.                      | 8               | 36     | 3     | 47    |
| 4.                       | 140             | 190    | —     | 330   | 52.                      | 10              | 35     | —     | 45    |
| 5.                       | 118             | 196    | —     | 314   | 53.                      | 11              | 30     | 3     | 44    |
| 6.                       | 25              | 230    | 13    | 268   | 54.                      | —               | 44     | —     | 44    |
| 7.                       | 56              | 196    | 5     | 257   | 55.                      | 12              | 30     | —     | 42    |
| 8.                       | 18              | 234    | 5     | 257   | 56.                      | 6               | 36     | —     | 42    |
| 9.                       | 105             | 145    | —     | 250   | 57.                      | —               | 39     | 2     | 41    |
| 10.                      | —               | 193    | —     | 193   | 58.                      | 9               | 32     | —     | 41    |
| 11.                      | 20              | 165    | —     | 185   | 59.                      | 10              | 30     | —     | 40    |
| 12.                      | 52              | 125    | —     | 177   | 60.                      | —               | 40     | —     | 40    |
| 13.                      | 24              | 148    | —     | 172   | 61.                      | 22              | 16     | —     | 38    |
| 14.                      | 75              | 92     | —     | 167   | 62.                      | 9               | 28     | —     | 37    |
| 15.                      | 28              | 126    | 12    | 166   | 63.                      | 5               | 30     | —     | 35    |
| 16.                      | 60              | 105    | —     | 165   | 64.                      | 16              | 14     | 4     | 34    |
| 17.                      | 69              | 87     | 4     | 160   | 65.                      | 20              | 5      | 7     | 32    |
| 18.                      | 65              | 80     | 9     | 154   | 66.                      | —               | 32     | —     | 32    |
| 19.                      | 48              | 93     | —     | 141   | 67.                      | 10              | 21     | —     | 31    |
| 20.                      | 56              | 81     | —     | 137   | 68.                      | —               | 30     | —     | 30    |
| 21.                      | —               | 119    | —     | 119   | 69.                      | —               | 30     | —     | 30    |
| 22.                      | 42              | 75     | —     | 117   | 70.                      | 5               | 24     | —     | 29    |
| 23.                      | 30              | 80     | —     | 110   | 71.                      | 25              | 4      | —     | 29    |
| 24.                      | 13              | 95     | —     | 108   | 72.                      | —               | 28     | —     | 28    |
| 25.                      | 25              | 73     | 4     | 102   | 73.                      | —               | 26     | —     | 26    |
| 26.                      | 28              | 69     | 5     | 102   | 74.                      | —               | 25     | —     | 25    |
| 27.                      | 20              | 80     | —     | 100   | 75.                      | —               | 25     | —     | 25    |
| 28.                      | 46              | 53     | —     | 99    | 76.                      | 8               | 14     | —     | 22    |
| 29.                      | 9               | 85     | 4     | 98    | 77.                      | 12              | 10     | —     | 22    |
| 30.                      | 39              | 53     | —     | 92    | 78.                      | 1               | 20     | —     | 21    |
| 31.                      | 6               | 82     | —     | 88    | 79.                      | 2               | 16     | 2     | 20    |
| 32.                      | 26              | 60     | —     | 86    | 80.                      | 5               | 15     | —     | 20    |
| 33.                      | 66              | 14     | —     | 80    | 81.                      | 9               | 10     | —     | 19    |
| 34.                      | 20              | 50     | 10    | 80    | 82.                      | 15              | 3      | —     | 18    |
| 35.                      | 8               | 65     | 3     | 76    | 83.                      | —               | 18     | —     | 18    |
| 36.                      | 13              | 62     | —     | 75    | 84.                      | —               | 18     | —     | 18    |
| 37.                      | 27              | 48     | —     | 75    | 85.                      | 10              | 3      | 4     | 17    |
| 38.                      | 30              | 45     | —     | 75    | 86.                      | —               | 16     | —     | 16    |
| 39.                      | 28              | 32     | 8     | 68    | 87.                      | —               | 15     | —     | 15    |
| 40.                      | —               | 63     | —     | 63    | 88.                      | —               | 12     | 2     | 14    |
| 41.                      | 15              | 46     | —     | 61    | 89.                      | 6               | 8      | —     | 14    |
| 42.                      | 17              | 41     | 3     | 61    | 90.                      | 4               | 10     | —     | 14    |
| 43.                      | —               | 60     | —     | 60    | 91.                      | 6               | 4      | 1     | 11    |
| 44.                      | 18              | 42     | —     | 60    | 92.                      | 3               | 5      | 2     | 10    |
| 45.                      | 8               | 51     | —     | 59    | 93.                      | 4               | 6      | —     | 10    |
| 46.                      | 13              | 41     | —     | 54    | 94.                      | 2               | 5      | —     | 7     |
| 47.                      | —               | 52     | —     | 52    | 95.                      | —               | 7      | —     | 7     |
| 48.                      | —               | 50     | —     | 50    | 96.                      | —               | 7      | —     | 7     |

TABLE 13  
 NUMBER OF ESTABLISHMENTS AND LABORERS IN THE SILK AND  
 COTTON KNITTING INDUSTRY (Continued)

| ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |       | ESTAB-<br>LISH-<br>MENTS | NO. OF LABOREES |        |       |       |
|--------------------------|-----------------|--------|-------|-------|--------------------------|-----------------|--------|-------|-------|
|                          | MALE            | FEMALE | CHILD | TOTAL |                          | MALE            | FEMALE | CHILD | TOTAL |
| No. 97.                  | 6               | —      | —     | 6     | No. 102.                 | 2               | —      | —     | 2     |
| 98.                      | 3               | 3      | —     | 6     |                          |                 |        |       |       |
| 99.                      | —               | —      | 5     | 5     |                          |                 |        |       |       |
| 100.                     | 3               | 2      | —     | 5     |                          |                 |        |       |       |
| 101.                     | 2               | 1      | —     | 3     | TOTAL                    | 2,236           | 6,251  | 128   | 8,625 |

SOURCES OF INFORMATION: INVESTIGATION CONDUCTED BY THE BUREAU  
 BASED UPON THE MEMBERS' LIST OF THE SHANGHAI KNITTING  
 FACTORIES EMPLOYERS' ASSOCIATION

No. of establishments investigated: 102  
 „ laborers „ 8,625  
 „ establishments estimated: 75  
 „ laborers „ 1,500  
 Method of estimation:

The list submitted by the Shanghai Knitting Factories Employers' Association consists of 102 establishments only. The number of non-member establishments is estimated at 75; each has in average about 20 laborers of which 30% being male, 65% female, and 5% child workers. Thus 75 establishments have in total 1,500 laborers, of which 450 are male, 975 female, and 75 child workers. The total number of establishments investigated and estimated amount to 177 with a total labor force of 10,125 laborers, which consist of 2,686 male, 7,236 female, and 203 child workers.

TABLE 14

NUMBER OF ESTABLISHMENTS AND LABORERS IN THE BLEACHING AND  
DYEING INDUSTRY

| ESTABLISHMENTS | NO. OF LABORERS |        |       |       | ESTABLISHMENTS | NO. OF LABORERS |        |       |       |
|----------------|-----------------|--------|-------|-------|----------------|-----------------|--------|-------|-------|
|                | MALE            | FEMALE | CHILD | TOTAL |                | MALE            | FEMALE | CHILD | TOTAL |
| No. 1.         | 400             |        |       | 400   | No. 27.        | 35              |        |       | 35    |
| 2.             | 300             |        |       | 300   | 28.            | 35              |        |       | 35    |
| 3.*            | 297             |        |       | 297   | 29.            | 35              |        |       | 35    |
| 4.*            | 150             |        |       | 150   | 30.            | 32              |        |       | 32    |
| 5.*            | 144             |        |       | 144   | 31.            | 30              |        |       | 30    |
| 6.             | 100             |        |       | 100   | 32.            | 29              |        |       | 29    |
| 7.             | 68              |        |       | 68    | 33.            | 29              |        |       | 29    |
| 8.*            | 61              |        |       | 61    | 34.            | 29              |        |       | 29    |
| 9.             | 60              |        |       | 60    | 35.            | 28              |        |       | 28    |
| 10.            | 59              |        |       | 59    | 36.            | 27              |        |       | 27    |
| 11.*           | 58              |        |       | 58    | 37.            | 26              |        |       | 26    |
| 12.            | 56              |        |       | 56    | 38.            | 25              |        |       | 25    |
| 13.            | 54              |        |       | 54    | 39.            | 25              |        |       | 25    |
| 14.            | 54              |        |       | 54    | 40.            | 25              |        |       | 25    |
| 15.            | 54              |        |       | 54    | 41.            | 24              |        |       | 24    |
| 16.            | 51              |        |       | 51    | 42.            | 22              |        |       | 22    |
| 17.            | 49              |        |       | 49    | 43.            | 19              |        |       | 19    |
| 18.            | 49              |        |       | 49    | 44.            | 19              |        |       | 19    |
| 19.            | 44              |        |       | 44    | 45.            | 18              |        |       | 18    |
| 20.            | 42              |        |       | 42    | 46.*           | 13              |        |       | 13    |
| 21.            | 41              |        |       | 41    | 47.            | 12              |        |       | 12    |
| 22.            | 38              |        |       | 38    | 48.*           | 6               |        |       | 6     |
| 23.            | 36              |        |       | 36    |                |                 |        |       |       |
| 24.            | 36              |        |       | 36    |                |                 |        |       |       |
| 25.            | 35              |        |       | 35    |                |                 |        |       |       |
| 26.            | 35              |        |       | 35    |                |                 |        |       |       |
|                |                 |        |       |       | TOTAL          | 2,914           |        |       | 2,914 |

SOURCES OF INFORMATION: PERSONAL INQUIRY MADE BY AGENTS  
OF THE BUREAU IN AUGUST 1929

No. of establishments investigated: 48  
,, laborers ,, 2,914

There are two types of bleaching and dyeing establishments in this city; one is known as "factories" which use machinery for manufacturing, and the other is given the name "fongs", where manual labor is the chief factor of production, though a few machines are installed in some of the "fongs." The above table includes not only all the "factories", but also those "fongs" where machinery is used. Beside these, the establishments marked out with a star (\*) are bleaching and dyeing factories, which are at the same time cotton weaving factories. The sum total of the laborers in all these establishments amounts to 2,914, all being males.

TABLE 15

## NUMBER OF ESTABLISHMENTS AND LABORERS IN THE TANNING INDUSTRY

| ESTABLISHMENTS | NO. OF LABORERS |        |       |       | ESTABLISHMENTS | NO. OF LABORERS |        |       |       |
|----------------|-----------------|--------|-------|-------|----------------|-----------------|--------|-------|-------|
|                | MALE            | FEMALE | CHILD | TOTAL |                | MALE            | FEMALE | CHILD | TOTAL |
| No. 1.         | 99              | 2      | 3     | 104   | No. 53.        | 8               | —      | —     | 8     |
| 2.             | 100             | —      | —     | 100   | 54.            | 8               | —      | —     | 8     |
| 3.             | 97              | —      | —     | 97    | 55.            | 8               | —      | —     | 8     |
| 4.             | 82              | —      | —     | 82    | 56.            | 8               | —      | —     | 8     |
| 5.             | 55              | —      | —     | 55    | 57.            | 5               | —      | 3     | 8     |
| 6.             | 54              | —      | —     | 54    | 58.            | 3               | —      | 5     | 8     |
| 7.             | 28              | —      | 15    | 43    | 59.            | 7               | —      | 1     | 8     |
| 8.             | 38              | —      | 4     | 42    | 60.            | 8               | —      | —     | 8     |
| 9.             | 35              | —      | 4     | 39    | 61.            | 4               | —      | 4     | 8     |
| 10.            | 38              | —      | —     | 38    | 62.            | 5               | —      | 3     | 8     |
| 11.            | 30              | —      | 8     | 38    | 63.            | 7               | —      | 1     | 8     |
| 12.            | 35              | —      | —     | 35    | 64.            | 8               | —      | —     | 8     |
| 13.            | 34              | —      | —     | 34    | 65.            | 2               | —      | 5     | 7     |
| 14.            | 32              | —      | —     | 32    | 66.            | 3               | —      | 4     | 7     |
| 15.            | 30              | —      | —     | 30    | 67.            | 3               | —      | 4     | 7     |
| 16.            | 28              | —      | —     | 28    | 68.            | 3               | —      | 4     | 7     |
| 17.            | 25              | —      | —     | 25    | 69.            | 7               | —      | —     | 7     |
| 18.            | 25              | —      | —     | 25    | 70.            | 3               | —      | 4     | 7     |
| 19.            | 20              | —      | 4     | 24    | 71.            | 2               | —      | 5     | 7     |
| 20.            | 15              | —      | 9     | 24    | 72.            | 6               | —      | —     | 6     |
| 21.            | 23              | —      | —     | 23    | 73.            | 6               | —      | —     | 6     |
| 22.            | 23              | —      | —     | 23    | 74.            | 4               | —      | 2     | 6     |
| 23.            | 17              | —      | 4     | 21    | 75.            | 4               | —      | 2     | 6     |
| 24.            | 20              | —      | —     | 20    | 76.            | 6               | —      | —     | 6     |
| 25.            | 20              | —      | —     | 20    | 77.            | 4               | —      | 2     | 6     |
| 26.            | 18              | —      | 1     | 19    | 78.            | 4               | —      | 2     | 6     |
| 27.            | 14              | —      | 3     | 17    | 79.            | 6               | —      | —     | 6     |
| 28.            | 14              | —      | 3     | 17    | 80.            | 1               | —      | 5     | 6     |
| 29.            | 12              | —      | 5     | 17    | 81.            | 2               | —      | 4     | 6     |
| 30.            | 8               | —      | 8     | 16    | 82.            | 3               | —      | 3     | 6     |
| 31.            | 14              | —      | 2     | 16    | 83.            | 5               | —      | —     | 5     |
| 32.            | 13              | —      | 3     | 16    | 84.            | 1               | —      | 4     | 5     |
| 33.            | 14              | —      | —     | 14    | 85.            | 2               | —      | 3     | 5     |
| 34.            | 14              | —      | —     | 14    | 86.            | 2               | —      | 3     | 5     |
| 35.            | 12              | —      | 2     | 14    | 87.            | 2               | —      | 3     | 5     |
| 36.            | 10              | —      | 4     | 14    | 88.            | 1               | —      | 4     | 5     |
| 37.            | 14              | —      | —     | 14    | 89.            | 2               | —      | 3     | 5     |
| 38.            | 13              | —      | —     | 13    | 90.            | 2               | —      | 3     | 5     |
| 39.            | 7               | —      | 6     | 13    | 91.            | 1               | —      | 4     | 5     |
| 40.            | 10              | —      | 3     | 13    | 92.            | 1               | —      | 4     | 5     |
| 41.            | 10              | —      | 3     | 13    | 93.            | 3               | —      | 2     | 5     |
| 42.            | 2               | —      | 10    | 12    | 94.            | 2               | —      | 3     | 5     |
| 43.            | 6               | —      | 5     | 11    | 95.            | 1               | —      | 4     | 5     |
| 44.            | 8               | —      | 3     | 11    | 96.            | 4               | —      | —     | 4     |
| 45.            | 10              | —      | —     | 10    | 97.            | 2               | —      | 2     | 4     |
| 46.            | 10              | —      | —     | 10    | 98.            | 1               | —      | 3     | 4     |
| 47.            | 3               | —      | 7     | 10    | 99.            | 2               | —      | 2     | 4     |
| 48.            | 7               | —      | 3     | 10    | 100.           | 2               | —      | 2     | 4     |
| 49.            | 7               | —      | 3     | 10    | 101.           | 2               | —      | 2     | 4     |
| 50.            | 10              | —      | —     | 10    | 102.           | 1               | —      | 3     | 4     |
| 51.            | 9               | —      | —     | 9     | 103.           | 2               | —      | 2     | 4     |
| 52.            | 9               | —      | —     | 9     | 104.           | 2               | —      | 2     | 4     |

TABLE 15  
 NUMBER OF ESTABLISHMENTS AND LABORERS IN THE  
 TANNING INDUSTRY (*Continued*)

| ESTABLISHMENTS | NO. OF LABORERS |        |       |       | ESTABLISHMENTS | NO. OF LABORERS |        |       |       |
|----------------|-----------------|--------|-------|-------|----------------|-----------------|--------|-------|-------|
|                | MALE            | FEMALE | CHILD | TOTAL |                | MALE            | FEMALE | CHILD | TOTAL |
| No. 105.       | 4               | —      | —     | 4     | No. 130.       | 1               | —      | 2     | 3     |
| 106.           | 1               | —      | 3     | 4     | 131.           | 2               | —      | 1     | 3     |
| 107.           | 2               | —      | 2     | 4     | 132.           | 2               | —      | 1     | 3     |
| 108.           | 2               | —      | 2     | 4     | 133.           | 2               | —      | 1     | 3     |
| 109.           | 2               | —      | 2     | 4     | 134.           | 2               | —      | 1     | 3     |
| 110.           | 2               | —      | 2     | 4     | 135.           | 2               | —      | 1     | 3     |
| 111.           | 1               | —      | 3     | 4     | 136.           | 2               | —      | —     | 2     |
| 112.           | 1               | —      | 2     | 3     | 137.           | 2               | —      | —     | 2     |
| 113.           | 3               | —      | —     | 3     | 138.           | 1               | —      | 1     | 2     |
| 114.           | 1               | —      | 2     | 3     | 139.           | 1               | —      | 1     | 2     |
| 115.           | 1               | —      | 2     | 3     | 140.           | 1               | —      | 1     | 2     |
| 116.           | 3               | —      | —     | 3     | 141.           | 2               | —      | —     | 2     |
| 117.           | 1               | —      | 2     | 3     | 142.           | 1               | —      | 1     | 2     |
| 118.           | 3               | —      | —     | 3     | 143.           | 2               | —      | —     | 2     |
| 119.           | 3               | —      | —     | 3     | 144.           | 1               | —      | 1     | 2     |
| 120.           | 2               | —      | 1     | 3     | 145.           | 1               | —      | 1     | 2     |
| 121.           | 1               | —      | 2     | 3     | 146.           | 2               | —      | —     | 2     |
| 122.           | 2               | —      | 1     | 3     | 147.           | 2               | —      | —     | 2     |
| 123.           | 2               | —      | 1     | 3     | 148.           | 2               | —      | —     | 2     |
| 124.           | 2               | —      | 1     | 3     | 149.           | 1               | —      | 1     | 2     |
| 125.           | 1               | —      | 2     | 3     | 150.           | 2               | —      | —     | 2     |
| 126.           | 1               | —      | 2     | 3     |                |                 |        |       |       |
| 127.           | 2               | —      | 1     | 3     |                |                 |        |       |       |
| 128.           | 2               | —      | 1     | 3     |                |                 |        |       |       |
| 129.           | 1               | —      | 2     | 3     |                |                 |        |       |       |
|                |                 |        |       |       | TOTAL          | 1,552           | 2      | 296   | 1,850 |

SOURCES OF INFORMATION: PERSONAL INQUIRY MADE BY AGENTS  
 OF THE BUREAU IN AUGUST, 1929

No. of establishments investigated: 150  
 „ laborers „ 1,850

About a dozen of the tanneries are of large scale; the rest are mostly small size plants. Male workers form the principal type of laborers in all factories, and child workers are auxiliaries. Two female workers are employed in the Chung Hwa Factory (No. 1) which is the only tannery that employs female workers.

TABLE 16

## NUMBER OF ESTABLISHMENTS AND LABORERS IN THE FLOUR INDUSTRY

| ESTABLISHMENTS | NO. OF LABORERS |        |       |       | ESTABLISHMENTS | NO. OF LABORERS |        |       |       |
|----------------|-----------------|--------|-------|-------|----------------|-----------------|--------|-------|-------|
|                | MALE            | FEMALE | CHILD | TOTAL |                | MALE            | FEMALE | CHILD | TOTAL |
| No. 1.         | 320             |        |       | 320   | No. 9.         | 120             |        |       | 120   |
| 2.             | 320             |        |       | 320   | 10.            | 104             |        |       | 104   |
| 3.             | 320             |        |       | 320   | 11.            | 87              |        |       | 87    |
| 4.             | 160             |        |       | 160   | 12.            | 80              |        |       | 80    |
| 5.             | 150             |        |       | 150   | 13.            | 56              |        |       | 56    |
| 6.             | 145             |        |       | 145   |                |                 |        |       |       |
| 7.             | 130             |        |       | 130   |                |                 |        |       |       |
| 8.             | 120             |        |       | 120   |                |                 |        |       |       |
|                |                 |        |       |       | TOTAL          | 2,112           |        |       | 2,112 |

SOURCES OF INFORMATION: PERSONAL INQUIRY MADE BY AGENTS  
OF THE BUREAU IN AUGUST, 1929

No. of establishments investigated: 13  
,, laborers ,, 2,112

The work of manufacturing in flour mills is largely done by machinery. Flour mills are usually of large scale, but employ a relatively smaller number of laborers. The laborers employed are mostly common workers of low skill. The 13 flour mills in this city, though all are big size plants, have only a total labor force of 2,112 male laborers.



TABLE 17

NUMBER OF ESTABLISHMENTS AND LABORERS IN THE OILS AND  
THEIR BY-PRODUCTS INDUSTRY

| ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |       | ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |       |
|--------------------------|-----------------|--------|-------|-------|--------------------------|-----------------|--------|-------|-------|
|                          | MALE            | FEMALE | CHILD | TOTAL |                          | MALE            | FEMALE | CHILD | TOTAL |
| No. 1                    | 500             |        |       | 500   | No. 8.                   | 101             |        |       | 101   |
| 2                        | 500             |        |       | 500   | 9.                       | 97              |        |       | 97    |
| 3                        | 134             |        |       | 134   | 10.                      | 86              |        |       | 86    |
| 4                        | 123             |        |       | 123   | 11.                      | 48              |        |       | 48    |
| 5                        | 122             |        |       | 122   |                          |                 |        |       |       |
| 6                        | 120             |        |       | 120   |                          |                 |        |       |       |
| 7                        | 120             |        |       | 120   |                          |                 |        |       |       |
|                          |                 |        |       |       | TOTAL                    | 1,951           |        |       | 1,951 |

Mills No. 1 & 2 are old-fashioned factories, where machinery is not used. A comparatively greater number of laborers are therefore employed.

TABLE 18

NUMBER OF ESTABLISHMENTS AND LABORERS IN THE EGG AND  
EGG-PRODUCTS INDUSTRY

| ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |       | ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |       |
|--------------------------|-----------------|--------|-------|-------|--------------------------|-----------------|--------|-------|-------|
|                          | MALE            | FEMALE | CHILD | TOTAL |                          | MALE            | FEMALE | CHILD | TOTAL |
| No. 1.                   | 299             | 623    |       | 922   | No. 6.                   | 54              | 116    |       | 170   |
| 2.                       | 291             | 480    |       | 771   | 7.                       | 12              | 20     |       | 32    |
| 3.                       | 250             | 350    |       | 600   |                          |                 |        |       |       |
| 4.                       | 298             | 295    |       | 593   |                          |                 |        |       |       |
| 5.                       | 195             | 302    |       | 497   | Total                    | 1,399           | 2,186  |       | 3,585 |

SOURCES OF INFORMATION: PERSONAL INQUIRY MADE BY AGENTS  
OF THE BUREAU IN AUGUST, 1929

No. of establishments investigated: 7  
 „ laborers „ 3,585

TABLE 19

NUMBER OF ESTABLISHMENTS AND LABORERS IN THE TOBACCO INDUSTRY

| ESTABLISHMENTS | NO. OF LABORERS |        |       |       | ESTABLISHMENTS | NO. OF LABORERS |        |       |        |
|----------------|-----------------|--------|-------|-------|----------------|-----------------|--------|-------|--------|
|                | MALE            | FEMALE | CHILD | TOTAL |                | MALE            | FEMALE | CHILD | TOTAL  |
| No. 1.         | 4,162           | 3,455  | 1,259 | 8,876 | No. 39.        | 20              | 80     |       | 100    |
| 2.             | 613             | 1,841  |       | 2,454 | 40.            | 18              | 80     |       | 98     |
| 3.             | 400             | 1,400  |       | 1,800 | 41.            | 17              | 70     |       | 87     |
| 4.             | 325             | 956    |       | 1,281 | 42.            | 30              | 50     |       | 80     |
| 5.             | 80              | 500    |       | 580   | 43.            | 7               | 70     |       | 77     |
| 6.             | 130             | 300    |       | 430   | 44.            | 11              | 60     |       | 71     |
| 7.             | 77              | 340    |       | 417   | 45.            | 20              | 50     |       | 70     |
| 8.             | 56              | 320    |       | 376   | 46.            | 4               | 60     |       | 64     |
| 9.             | 50              | 298    |       | 348   | 47.            | 12              | 50     |       | 62     |
| 10.            | 40              | 300    |       | 340   | 48.            | 12              | 50     |       | 62     |
| 11.            | 50              | 250    |       | 300   | 49.            | 10              | 50     |       | 60     |
| 12.            | 32              | 250    |       | 282   | 50.            | 9               | 50     |       | 59     |
| 13.            | 80              | 200    |       | 280   | 51.            | 10              | 48     |       | 58     |
| 14.            | 64              | 192    |       | 256   | 52.            | 6               | 48     |       | 54     |
| 15.            | 31              | 220    |       | 251   | 53.            | 14              | 40     |       | 54     |
| 16.            | 50              | 200    |       | 250   | 54.            | 12              | 40     |       | 52     |
| 17.            | 60              | 190    |       | 250   | 55.            | 8               | 40     |       | 48     |
| 18.            | 58              | 187    |       | 245   | 56.            | 7               | 40     |       | 47     |
| 19.            | 40              | 200    |       | 240   | 57.            | 7               | 40     |       | 47     |
| 20.            | 20              | 200    |       | 220   | 58.            | 15              | 30     |       | 45     |
| 21.            | 70              | 150    |       | 220   | 59.            | 14              | 30     |       | 44     |
| 22.            | 50              | 148    |       | 198   | 60.            | 3               | 40     |       | 43     |
| 23.            | 26              | 170    |       | 196   | 61.            | 7               | 35     |       | 42     |
| 24.            | 30              | 160    |       | 190   | 62.            | 12              | 30     |       | 42     |
| 25.            | 30              | 150    |       | 180   | 63.            | 6               | 35     |       | 41     |
| 26.            | 30              | 150    |       | 180   | 64.            | 5               | 35     |       | 40     |
| 27.            | 30              | 150    |       | 180   | 65.            | 10              | 30     |       | 40     |
| 28.            | 26              | 150    |       | 176   | 66.            | 5               | 30     |       | 35     |
| 29.            | 30              | 144    |       | 174   | 67.            | 5               | 30     |       | 35     |
| 30.            | 16              | 150    |       | 166   | 68.            | 3               | 25     |       | 28     |
| 31.            | 35              | 130    |       | 165   | 69.            | 3               | 25     |       | 28     |
| 32.            | 12              | 150    |       | 162   | 70.            | 4               | 20     |       | 24     |
| 33.            | 18              | 130    |       | 148   | 71.            | 5               | 18     |       | 23     |
| 34.            | 43              | 89     |       | 132   | 72.            | 6               | 15     |       | 21     |
| 35.            | 30              | 100    |       | 130   |                |                 |        |       |        |
| 36.            | 20              | 90     |       | 110   |                |                 |        |       |        |
| 37.            | 25              | 78     |       | 103   |                |                 |        |       |        |
| 38.            | 20              | 80     |       | 100   |                |                 |        |       |        |
|                |                 |        |       |       | TOTAL          | 7,296           | 15,612 | 1,259 | 24,167 |

SOURCES OF INFORMATION: INVESTIGATION MADE BY THE SHANGHAI CIGARETTE FACTORY EMPLOYERS' ASSOCIATION, BING LOH LI, TIBET ROAD, CHECKED BY THE AGENTS OF THE BUREAU IN AUGUST, 1929

No. of establishments investigatd: 72  
 „ laborers „ 24,167

|                                  |     |
|----------------------------------|-----|
| No. of establishments estimated: | 18  |
| ,, laborers                      | 130 |
| Method of estimation:            |     |

According to the investigation of the Shanghai Cigarette Factory Employers' Association, there are 72 member factories, which have a total labor force of 24,167 laborers: 7,296 males, 15,612 females, and 1,259 child workers. It is estimated that the number of non-member factories amount to 18, among them 4 being cigarette factories with 15 laborers each, and 14 being cigar factories of very small scale with about 5 laborers each. These 18 establishments have in total 130 laborers, of which 30% are male workers and 70% female workers. The number of investigated and estimated establishments taken together amount to 90, which have altogether 24,297 laborers (male workers, 7,335; female workers, 15,703; and child workers, 1,259).

TABLE 20

NUMBER OF ESTABLISHMENTS AND LABORERS IN THE PAPER  
MAKING INDUSTRY

| ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |       | ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |       |
|--------------------------|-----------------|--------|-------|-------|--------------------------|-----------------|--------|-------|-------|
|                          | MALE            | FEMALE | CHILD | TOTAL |                          | MALE            | FEMALE | CHILD | TOTAL |
| No. 1.                   | 182             | 330    |       | 512   | No. 6.                   | 50              | 14     |       | 64    |
| 2.                       | 199             | 230    |       | 429   | 7.                       | 41              | 7      |       | 48    |
| 3.                       | 199             | 10     |       | 209   |                          |                 |        |       |       |
| 4.                       | 117             | 30     |       | 147   |                          |                 |        |       |       |
| 5.                       | 84              | 60     |       | 144   | TOTAL                    | 872             | 681    |       | 1,553 |

SOURCES OF INFORMATION: PERSONAL INQUIRY MADE BY AGENTS  
OF THE BUREAU IN AUGUST, 1929

No. of establishments investigated: 7  
 „ laborers „ 1,553

TABLE 21

## NUMBER OF ESTABLISHMENTS AND LABORERS IN THE PRINTING INDUSTRY

| ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |       | ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |       |
|--------------------------|-----------------|--------|-------|-------|--------------------------|-----------------|--------|-------|-------|
|                          | MALE            | FEMALE | CHILD | TOTAL |                          | MALE            | FEMALE | CHILD | TOTAL |
| No. 1.                   | 1,242           | 186    | 160   | 1,588 | No. 51.                  | 36              | —      | 10    | 46    |
| 2.                       | 527             | 12     | 112   | 651   | 52.                      | 32              | —      | 14    | 46    |
| 3.                       | 320             | 63     | —     | 383   | 53.                      | 34              | —      | 12    | 46    |
| 4.                       | 130             | 25     | 95    | 250   | 54.                      | 35              | —      | 10    | 45    |
| 5.                       | 194             | 4      | 20    | 218   | 55.                      | 33              | —      | 12    | 45    |
| 6.                       | 152             | 15     | 38    | 205   | 56.                      | 30              | —      | 15    | 45    |
| 7.                       | 97              | 53     | 35    | 185   | 57.                      | 33              | —      | 11    | 44    |
| 8.                       | 80              | 30     | 50    | 160   | 58.                      | 31              | —      | 13    | 44    |
| 9.                       | 95              | 15     | 40    | 150   | 59.                      | 33              | —      | 10    | 43    |
| 10.                      | 115             | —      | 25    | 140   | 60.                      | 31              | —      | 12    | 43    |
| 11.                      | 102             | 6      | 30    | 138   | 61.                      | 21              | —      | 22    | 43    |
| 12.                      | 89              | 4      | 25    | 118   | 62.                      | 30              | —      | 12    | 42    |
| 13.                      | 87              | 5      | 21    | 113   | 63.                      | 31              | —      | 11    | 42    |
| 14.                      | 69              | —      | 33    | 102   | 64.                      | 30              | —      | 12    | 42    |
| 15.                      | 84              | —      | 18    | 102   | 65.                      | 18              | —      | 24    | 42    |
| 16.                      | 75              | 4      | 22    | 101   | 66.                      | 31              | —      | 10    | 41    |
| 17.                      | 65              | 8      | 20    | 93    | 67.                      | 34              | —      | 7     | 41    |
| 18.                      | 77              | —      | 15    | 92    | 68.                      | 31              | —      | 9     | 40    |
| 19.                      | 71              | —      | 15    | 86    | 69.                      | 28              | —      | 12    | 40    |
| 20.                      | 62              | —      | 17    | 79    | 70.                      | 31              | —      | 9     | 40    |
| 21.                      | 37              | —      | 40    | 77    | 71.                      | 27              | —      | 12    | 39    |
| 22.                      | 55              | —      | 20    | 75    | 72.                      | 27              | —      | 11    | 38    |
| 23.                      | 56              | —      | 17    | 73    | 73.                      | 28              | —      | 8     | 36    |
| 24.                      | 58              | —      | 15    | 73    | 74.                      | 18              | —      | 18    | 36    |
| 25.                      | 57              | —      | 16    | 73    | 75.                      | 27              | —      | 9     | 36    |
| 26.                      | 59              | —      | 14    | 73    | 76.                      | 26              | —      | 10    | 36    |
| 27.                      | 40              | —      | 29    | 69    | 77.                      | 26              | —      | 9     | 35    |
| 28.                      | 58              | —      | 9     | 67    | 78.                      | 25              | —      | 10    | 35    |
| 29.                      | 52              | —      | 10    | 62    | 79.                      | 26              | —      | 9     | 35    |
| 30.                      | 46              | —      | 16    | 62    | 80.                      | 28              | —      | 7     | 35    |
| 31.                      | 47              | —      | 15    | 62    | 81.                      | 24              | —      | 11    | 35    |
| 32.                      | 45              | —      | 15    | 60    | 82.                      | 19              | —      | 15    | 34    |
| 33.                      | 39              | —      | 20    | 59    | 83.                      | 23              | —      | 10    | 33    |
| 34.                      | 46              | —      | 13    | 59    | 84.                      | 25              | —      | 8     | 33    |
| 35.                      | 49              | —      | 8     | 57    | 85.                      | 22              | —      | 10    | 32    |
| 36.                      | 44              | —      | 13    | 57    | 86.                      | 24              | —      | 8     | 32    |
| 37.                      | 43              | —      | 14    | 57    | 87.                      | 25              | —      | 7     | 32    |
| 38.                      | 33              | —      | 24    | 57    | 88.                      | 25              | —      | 7     | 32    |
| 39.                      | 40              | —      | 14    | 54    | 89.                      | 23              | —      | 8     | 31    |
| 40.                      | 41              | —      | 13    | 54    | 90.                      | 23              | —      | 8     | 31    |
| 41.                      | 41              | —      | 11    | 52    | 91.                      | 23              | —      | 8     | 31    |
| 42.                      | 32              | —      | 19    | 51    | 92.                      | 14              | —      | 17    | 31    |
| 43.                      | 23              | —      | 27    | 50    | 93.                      | 21              | —      | 9     | 30    |
| 44.                      | 32              | —      | 18    | 50    | 94.                      | 22              | —      | 8     | 30    |
| 45.                      | 37              | —      | 12    | 49    | 95.                      | 23              | —      | 7     | 30    |
| 46.                      | 40              | —      | 8     | 48    | 96.                      | 16              | —      | 14    | 30    |
| 47.                      | 37              | —      | 11    | 48    | 97.                      | 22              | —      | 8     | 30    |
| 48.                      | 35              | —      | 12    | 47    | 98.                      | 21              | —      | 8     | 29    |
| 49.                      | 34              | —      | 13    | 47    | 99.                      | 21              | —      | 8     | 29    |
| 50.                      | 35              | —      | 12    | 47    | 100.                     | 15              | —      | 14    | 29    |

TABLE 21

## NUMBER OF ESTABLISHMENTS AND LABORERS IN THE PRINTING INDUSTRY

(Continued)

| ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |       | ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |       |
|--------------------------|-----------------|--------|-------|-------|--------------------------|-----------------|--------|-------|-------|
|                          | MALE            | FEMALE | CHILD | TOTAL |                          | MALE            | FEMALE | CHILD | TOTAL |
| No. 101.                 | 16              |        | 12    | 28    | No. 153.                 | 10              |        | 6     | 16    |
| 102.                     | 20              |        | 7     | 27    | 154.                     | 13              |        | 3     | 16    |
| 103.                     | 18              |        | 8     | 26    | 155.                     | 11              |        | 5     | 16    |
| 104.                     | 18              |        | 8     | 26    | 156.                     | 11              |        | 5     | 16    |
| 105.                     | 18              |        | 8     | 26    | 157.                     | 11              |        | 4     | 15    |
| 106.                     | 15              |        | 10    | 25    | 158.                     | 10              |        | 5     | 15    |
| 107.                     | 18              |        | 7     | 25    | 159.                     | 10              |        | 5     | 15    |
| 108.                     | 11              |        | 14    | 25    | 160.                     | 9               |        | 5     | 14    |
| 109.                     | 18              |        | 7     | 25    | 161.                     | 11              |        | 3     | 14    |
| 110.                     | 20              |        | 4     | 24    | 162.                     | 7               |        | 6     | 13    |
| 111.                     | 15              |        | 9     | 24    | 163.                     | 7               |        | 6     | 13    |
| 112.                     | 17              |        | 7     | 24    | 164.                     | 8               |        | 5     | 13    |
| 113.                     | 17              |        | 7     | 24    | 165.                     | 9               |        | 4     | 13    |
| 114.                     | 15              |        | 9     | 24    | 166.                     | 7               |        | 5     | 12    |
| 115.                     | 17              |        | 7     | 24    | 167.                     | 8               |        | 4     | 12    |
| 116.                     | 17              |        | 7     | 24    | 168.                     | 8               |        | 4     | 12    |
| 117.                     | 17              |        | 7     | 24    | 169.                     | 7               |        | 5     | 12    |
| 118.                     | 17              |        | 7     | 24    | 170.                     | 7               |        | 4     | 11    |
| 119.                     | 16              |        | 7     | 23    | 171.                     | 5               |        | 6     | 11    |
| 120.                     | 13              |        | 9     | 22    | 172.                     | 6               |        | 5     | 11    |
| 121.                     | 10              |        | 12    | 22    | 173.                     | 5               |        | 6     | 11    |
| 122.                     | 16              |        | 6     | 22    | 174.                     | 7               |        | 4     | 11    |
| 123.                     | 16              |        | 6     | 22    | 175.                     | 7               |        | 4     | 11    |
| 124.                     | 16              |        | 6     | 22    | 176.                     | 7               |        | 4     | 11    |
| 125.                     | 13              |        | 8     | 21    | 177.                     | 3               |        | 8     | 11    |
| 126.                     | 15              |        | 6     | 21    | 178.                     | 8               |        | 3     | 11    |
| 127.                     | 6               |        | 15    | 21    | 179.                     | 7               |        | 4     | 11    |
| 128.                     | 13              |        | 7     | 20    | 180.                     | 8               |        | 3     | 11    |
| 129.                     | 15              |        | 5     | 20    | 181.                     | 6               |        | 4     | 10    |
| 130.                     | 13              |        | 7     | 20    | 182.                     | 6               |        | 4     | 10    |
| 131.                     | 8               |        | 12    | 20    | 183.                     | 6               |        | 4     | 10    |
| 132.                     | 15              |        | 5     | 20    | 184.                     | 5               |        | 5     | 10    |
| 133.                     | 16              |        | 4     | 20    | 185.                     | 6               |        | 4     | 10    |
| 134.                     | 13              |        | 6     | 19    | 186.                     | 6               |        | 4     | 10    |
| 135.                     | 12              |        | 7     | 19    | 187.                     | 6               |        | 4     | 10    |
| 136.                     | 13              |        | 6     | 19    | 188.                     | 5               |        | 4     | 9     |
| 137.                     | 8               |        | 11    | 19    | 189.                     | 5               |        | 4     | 9     |
| 138.                     | 12              |        | 7     | 19    | 190.                     | 6               |        | 3     | 9     |
| 139.                     | 12              |        | 7     | 19    | 191.                     | 5               |        | 4     | 9     |
| 140.                     | 12              |        | 6     | 18    | 192.                     | 5               |        | 4     | 9     |
| 141.                     | 13              |        | 5     | 18    | 193.                     | 4               |        | 5     | 9     |
| 142.                     | 8               |        | 10    | 18    | 194.                     | 6               |        | 3     | 9     |
| 143.                     | 10              |        | 8     | 18    | 195.                     | 6               |        | 3     | 9     |
| 144.                     | 12              |        | 6     | 18    | 196.                     | 5               |        | 3     | 8     |
| 145.                     | 13              |        | 5     | 18    | 197.                     | 5               |        | 3     | 8     |
| 146.                     | 13              |        | 4     | 17    | 198.                     | 6               |        | 2     | 8     |
| 147.                     | 14              |        | 3     | 17    | 199.                     | 6               |        | 2     | 8     |
| 148.                     | 12              |        | 5     | 17    | 200.                     | 5               |        | 3     | 8     |
| 149.                     | 11              |        | 6     | 17    | 201.                     | 4               |        | 4     | 8     |
| 150.                     | 12              |        | 5     | 17    | 202.                     | 5               |        | 3     | 8     |
| 151.                     | 11              |        | 6     | 17    | 203.                     | 4               |        | 3     | 7     |
| 152.                     | 9               |        | 7     | 16    | 204.                     | 5               |        | 2     | 7     |

TABLE 21  
 NUMBER OF ESTABLISHMENTS AND LABORERS IN THE PRINTING INDUSTRY  
 (Continued)

| ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |       | ESTAB-<br>LISH-<br>MENTS | NO. OF LABORERS |        |       |        |
|--------------------------|-----------------|--------|-------|-------|--------------------------|-----------------|--------|-------|--------|
|                          | MALE            | FEMALE | CHILD | TOTAL |                          | MALE            | FEMALE | CHILD | TOTAL  |
| No. 205.                 | 4               |        | 3     | 7     | No. 214.                 | 4               |        | 2     | 6      |
| 206.                     | 5               |        | 2     | 7     | 215.                     | 4               |        | 2     | 6      |
| 207.                     | 5               |        | 2     | 7     | 216.                     | 4               |        | 2     | 6      |
| 208.                     | 5               |        | 2     | 7     | 217.                     | 3               |        | 2     | 5      |
| 209.                     | 5               |        | 2     | 7     | 218.                     | 3               |        | 2     | 5      |
| 210.                     | 4               |        | 3     | 7     | 219.                     | 3               |        | 2     | 5      |
| 211.                     | 4               |        | 3     | 7     |                          |                 |        |       |        |
| 212.                     | 4               |        | 2     | 6     |                          |                 |        |       |        |
| 213.                     | 4               |        | 2     | 6     |                          |                 |        |       |        |
|                          |                 |        |       |       | TOTAL                    | 7,455           | 430    | 2,452 | 10,337 |

SOURCES OF INFORMATION: PERSONAL INQUIRY MADE BY AGENTS  
 OF THE BUREAU IN AUGUST, 1929

No. of establishments investigated: 219

„ laborers „ 10,337

„ establishments estimated: 200

„ laborers „ 3,000

Method of estimation:

Printing presses are found in all parts of the city. The investigation made by the Bureau is limited to those of comparatively large size and those readily accessible. Presses of very small scale and those situated in unfrequented quarters have been inevitably omitted. The number of establishments investigated amount to 219, and that of laborers to 10,337. According to the estimation of the Color Lithographic Printers' Union, the Black Plate-Makers' Union, the Lithographic Gum Paper Manufacturers' Union, Union of China and Foreign Printers and the Black Lithographic Machine Workers' Union, the number of establishments not covered in the investigation amount to about 200 with about 15 laborers each (10 male, 1 female, and 4 child workers), making a total of 3,000 laborers (2,000 male, 200 female, 800 child workers). The total number of establishments investigated and estimated amount to 419, and the total number of laborers, 13,337, of which 9,455 are male, 630 female, and 3,252 child workers.



Frequency  
distribution  
of establish-  
ments ac-  
cording to  
number of  
laborers

In order to derive from the foregoing tables a general idea of the distribution of the establishments according to the number of laborers, a frequency table has been constructed. The total number of establishments in the frequency table amount to 1,584. According to the results of investigation and estimation, there are altogether 2,326 establishments, among them 733 establishments are based upon estimation, and 9 establishments in the cotton spinning industry are excluded due to lack of information regarding their number of laborers (in 2 of the establishments, no information regarding the number of laborers is available; in the other seven, which are branch establishments, only the total number of laborers in the composite establishments are given and no separate records are kept for the branch plants). These establishments are not included in the table of frequency distribution.

Out of the 1,584 establishments investigated this year, as appeared in the frequency table, if those establishments with less than 30 laborers are rejected, there leave only 697 establishments, should the definition given in the Factory Law be observed. The great number of establishments with less than 30 laborers can be explained by the great number of establishments in the foundry, machinery, and printing industries, which are mostly small scale plants with a small size labor force under employment. But, as the aim of the investigation is to inquire into the total number of laborers in the various industries, we have to include all establishments regardless of their size and the definition given in the Factory Law.

The following table of frequency distribution of the establishments according to the number of laborers needs some explanation. The greatest number of frequencies appears in the class under 10 laborers, which comprises 414 establishments. The next class from 10 to 19 laborers comprises 307 establishments; from 20 to 29, 166; from 30 to 39, 96; from 40 to 49, 97; etc., etc. The class interval changes from 10 to 50 laborers, when it comes to the class from 100 to 149 laborers, which has the greatest number of 69 establishments among the classes of the same class interval. The class interval again changes from 50 to 100 laborers, when it comes to the class from 500 to 599 laborers, with 13 establishments under it.

The frequency table shows that there are 46 establishments having over 1,000 laborers. However, according to the tables of the number of establishments and laborers in the various industries, there are, though quite a number of establishments having over 1,000 laborers, very few establishments with 4,000 to 5,000 laborers. The British-American Tobacco Co. employs 8,876 laborers, but this is the sum total of the number of laborers in all the main and branch plants. Three of the British cotton mills, Yu Ho, Kung Yih, and Yang Tze Poo, have

altogether 11,100 laborers under employment; no separate figures are given for the individual mills. Again, for instance, only the total number of laborers is given for mills No. 29 and No. 30 etc. Following is the frequency table showing the distribution of establishments according to the number of laborers:

TABLE 22  
FREQUENCY DISTRIBUTION OF THE ESTABLISHMENTS IN THE VARIOUS  
INDUSTRIES ACCORDING TO THE NUMBER OF LABORERS

| NO. OF LABORERS | NO. OF ESTABLISHMENTS | NO. OF LABORERS | NO. OF ESTABLISHMENTS |
|-----------------|-----------------------|-----------------|-----------------------|
| Under 10        | 414                   | 300-349         | 51                    |
| 10- 19          | 307                   | 350-399         | 33                    |
| 20- 29          | 166                   | 400-449         | 9                     |
| 30- 39          | 96                    | 450-499         | 7                     |
| 40- 49          | 97                    | 500-599         | 13                    |
| 50- 59          | 47                    | 600-699         | 9                     |
| 60- 69          | 35                    | 700-799         | 6                     |
| 70- 79          | 21                    | 800-899         | 2                     |
| 80- 89          | 26                    | 900-999         | 8                     |
| 90- 99          | 18                    | 1000 and above  | 46                    |
| 100-149         | 69                    |                 |                       |
| 150-199         | 47                    |                 |                       |
| 200-249         | 27                    |                 |                       |
| 250-299         | 30                    |                 |                       |
|                 |                       | TOTAL           | 1,584                 |

The above table is inclusive of all establishments covered in the investigation made in August 1929, but exclusive of establishments estimated. Establishment having a number of branch plants but with only the sum total of the number of laborers in the main and branch plants known is considered as one unit establishment.

**Collection  
of wage  
rate data**

After the investigation into the total number of laborers had been made in August 1929, the collection of wage rate data was immediately started in the following month, and was accomplished by October of the same year. In the following table showing the distribution of factory laborers in Greater Shanghai according to industries, both the results of the investigation and estimation made in August, and the number of laborers covered in the collection of wage rate data are given parallelly. Such a parallel arrangement enables a verification as to whether the number of laborers covered in wage rate data collection amount to the standard ratio of one-third of the total number of laborers in the various industries. The table shows that the number of laborers investigated exceed the one-third ratio in some industries, and fall behind in others.

**The one-third ratio**

Those industries where the investigation failed to cover one-third of the total number of laborers consist of the following: glass, silk and cotton knitting, egg and egg-products, tobacco, and printing. The glass manufacturing industry in this city has not been very prosperous. Cut-throat competition among rival establishments has recently resulted in the closing down of a number of factories. The number of laborers employed is constantly decreasing. Great difficulties, therefore, are involved in the collection of wage rate data. The silk and cotton knitting industry consists of a large number of small establishments scattered over all parts of the city. We were not able to get hold of a sufficient number of laborers in spite of our efforts in locating those scattered plants. There are altogether 7 establishments in the egg and egg-products industry in this city. Three of them are Chinese establishments, from which no difficulties are involved in gathering data. Among the other 4 foreign establishments, only one, the Henningsen Egg Products Co., agreed to submit to our investigation. The number of laborers therefore fall short in this industry. The trouble with the tobacco industry lies in the refusal of foreign establishments, such as the British-American Tobacco Co. and the American Tobacco Co., to supply the data required. Also, the difficulties with the small tobacco factories tend to intensify the deficit in the number of laborers. Our investigation in the printing industry was limited to establishments of appreciable size. Data from establishments of very small scale and from most of the foreign establishments were inaccessible. Industries where the investigation covers more than one-third of the total number of laborers consist of the following: sawing, soap, match, enamel, silk reeling, silk weaving, cotton weaving, bleaching and dyeing, flour, oils and their by-products, and paper. The greater number of laborers than required naturally tend to afford a better representation of the respective industries.

Our investigation into the wage rates of factory laborers covers 274 establishments in 21 industries. The total number of laborers investigated are 97,042, of which 31,053 or 32% are male workers, 58,473 or 60.3% female workers, and 7,516 or 7.7% child workers. The number of time workers amount to 56,629 or 58.4% (27,297 males, 22,676 females, and 6,656 child workers); that of piece workers amount to 40,413 or 41.6% (3,756 males, 35,797 females, and 860 child workers). The 97,042 laborers covered in the investigation constitute approximately one-third of the total number of laborers estimated, which amount to 285,700. Therefore, as a whole, the result of the collection forms by the number of laborers covered quite an effective representation of the various industries in this city. Following is the table of the distribution of factory laborers in Greater Shanghai according to industries:

TABLE 23

## DISTRIBUTION OF FACTORY LABORERS IN GREATER SHANGHAI ACCORDING TO INDUSTRIES

| CLASSIFICATION<br>OF<br>INDUSTRIES                                                           | TOTAL               |                 |         |                  |         | INVESTIGATED             |                 |       |        |        |        |        |       |       |       |       |        |
|----------------------------------------------------------------------------------------------|---------------------|-----------------|---------|------------------|---------|--------------------------|-----------------|-------|--------|--------|--------|--------|-------|-------|-------|-------|--------|
|                                                                                              | NO. OF<br>FACTORIES | NO. OF LABORERS |         |                  |         | NO. OF<br>FAC-<br>TORIES | NO. OF LABORERS |       |        |        |        |        |       |       |       | TOTAL |        |
|                                                                                              |                     | MALES           | FEMALES | CHILD<br>WORKERS | TOTAL   |                          | MALE            |       |        | FEMALE |        |        | CHILD |       |       |       |        |
|                                                                                              |                     |                 |         |                  |         |                          | TIME            | PIECE | TOTAL  | TIME   | PIECE  | TOTAL  | TIME  | PIECE | TOTAL |       |        |
| I. Wood Working                                                                              |                     |                 |         |                  |         |                          |                 |       |        |        |        |        |       |       |       |       |        |
| A. Sawing                                                                                    | 23                  | 1,886           | —       | —                | 1,886   | 7                        | 1,183           | —     | 1,183  | —      | —      | —      | —     | —     | —     | —     | 1,183  |
| II. Metallurgy                                                                               |                     |                 |         |                  |         |                          |                 |       |        |        |        |        |       |       |       |       |        |
| A. Foundry                                                                                   | 120                 | 1,133           | —       | 516              | 1,649   | 24                       | 540             | —     | 540    | —      | —      | —      | —     | —     | —     | —     | 540    |
| III. Machinery and<br>Metal Tools and<br>Utensils                                            |                     |                 |         |                  |         |                          |                 |       |        |        |        |        |       |       |       |       |        |
| A. Machinery                                                                                 | 518                 | 6,455           | —       | 3,300            | 9,755   | 31                       | 2,894           | 64    | 2,958  | —      | —      | —      | —     | —     | —     | —     | 2,958  |
| IV. Construction of<br>Boats, Ships, and<br>Vehicles for Land<br>and Air Trans-<br>portation |                     |                 |         |                  |         |                          |                 |       |        |        |        |        |       |       |       |       |        |
| A. Ship-building                                                                             | 13                  | 5,994           | —       | 254              | 6,248   | 3                        | 2,040           | —     | 2,040  | —      | —      | —      | —     | —     | —     | —     | 2,040  |
| V. Manufacture of<br>Bricks, Earthen-<br>wares, Glass, etc.                                  |                     |                 |         |                  |         |                          |                 |       |        |        |        |        |       |       |       |       |        |
| A. Glass-making                                                                              | 30                  | 1,588           | —       | 1,455            | 3,043   | 8                        | 466             | —     | 466    | —      | —      | —      | 449   | —     | 449   | —     | 915    |
| VI. Manufacture of<br>Chemicals and<br>Allied Products                                       |                     |                 |         |                  |         |                          |                 |       |        |        |        |        |       |       |       |       |        |
| A. Soap-making                                                                               | 36                  | 800             | 305     | —                | 1,105   | 9                        | 568             | —     | 568    | 241    | —      | 241    | —     | —     | —     | —     | 809    |
| B. Match-mak-<br>ing                                                                         | 7                   | 911             | 1,232   | 553              | 2,696   | 4                        | 253             | 306   | 559    | —      | 818    | 818    | 24    | 318   | 342   | —     | 1,719  |
| C. Enamelling                                                                                | 16                  | 1,857           | 353     | 90               | 2,300   | 6                        | 994             | 13    | 1,007  | 168    | 18     | 186    | 59    | —     | 59    | —     | 1,252  |
| VII. Textiles                                                                                |                     |                 |         |                  |         |                          |                 |       |        |        |        |        |       |       |       |       |        |
| A. Silk Reeling                                                                              | 107                 | 1,712           | 37,211  | 12,453           | 51,376  | 43                       | 518             | —     | 518    | 14,643 | —      | 14,643 | 4,873 | —     | 4,873 | —     | 20,034 |
| B. Cotton Spin-<br>ning                                                                      | 61                  | 23,064          | 84,270  | 3,548            | 110,882 | 19                       | 7,205           | 353   | 7,558  | 4,696  | 22,878 | 27,574 | 984   | 177   | 1,161 | —     | 36,293 |
| C. Silk Weaving                                                                              | 68                  | 2,563           | 1,229   | —                | 3,792   | 12                       | 385             | 617   | 1,002  | 292    | 274    | 566    | —     | —     | —     | —     | 1,568  |
| D. Cotton Weav-<br>ing                                                                       | 405                 | 6,547           | 22,394  | 303              | 29,244  | 21                       | 1,706           | 852   | 2,558  | 721    | 6,407  | 7,128  | 60    | 334   | 394   | —     | 10,080 |
| E. Silk and Cot-<br>ton Knitting                                                             | 177                 | 2,686           | 7,236   | 203              | 10,125  | 15                       | 298             | 274   | 572    | 230    | 1,364  | 1,594  | —     | —     | —     | —     | 2,166  |
| F. Bleaching and<br>Dyeing                                                                   | 48                  | 2,914           | —       | —                | 2,914   | 18                       | 1,443           | —     | 1,443  | —      | —      | —      | —     | —     | —     | —     | 1,443  |
| VIII. Manufacture of<br>Leather, Skin,<br>and Rubber                                         |                     |                 |         |                  |         |                          |                 |       |        |        |        |        |       |       |       |       |        |
| A. Tanning                                                                                   | 150                 | 1,552           | 2       | 296              | 1,850   | 12                       | 592             | —     | 592    | —      | —      | —      | —     | —     | —     | —     | 592    |
| IX. Manufacture of<br>Food, Drinks,<br>and Tobacco                                           |                     |                 |         |                  |         |                          |                 |       |        |        |        |        |       |       |       |       |        |
| A. Flour                                                                                     | 13                  | 2,112           | —       | —                | 2,112   | 10                       | 1,521           | —     | 1,521  | —      | —      | —      | —     | —     | —     | —     | 1,521  |
| B. Oils and their<br>By-products                                                             | 11                  | 1,951           | —       | —                | 1,951   | 10                       | 923             | 498   | 1,421  | —      | —      | —      | —     | —     | —     | —     | 1,421  |
| C. Egg and Egg-<br>products                                                                  | 7                   | 1,399           | 2,186   | —                | 3,585   | 3                        | 341             | —     | 341    | 764    | —      | 764    | —     | —     | —     | —     | 1,105  |
| D. Tobacco                                                                                   | 90                  | 7,335           | 15,703  | 1,259            | 24,297  | 7                        | 1,356           | —     | 1,356  | 565    | 3,835  | 4,401  | 113   | —     | 113   | —     | 5,876  |
| X. Paper and Print-<br>ing                                                                   |                     |                 |         |                  |         |                          |                 |       |        |        |        |        |       |       |       |       |        |
| A. Paper-making                                                                              | 7                   | 872             | 681     | —                | 1,553   | 5                        | 792             | —     | 792    | 270    | —      | 270    | —     | —     | —     | —     | 1,062  |
| B. Printing                                                                                  | 419                 | 9,455           | 630     | 3,252            | 13,337  | 7                        | 1,279           | 779   | 2,058  | 85     | 203    | 288    | 94    | 31    | 125   | —     | 2,471  |
| TOTAL                                                                                        | 2,326               | 84,786          | 173,432 | 27,482           | 285,700 | 274                      | 27,297          | 3,756 | 31,053 | 22,676 | 35,797 | 58,473 | 6,656 | 860   | 7,516 | —     | 97,042 |

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## CHAPTER 2

### AVERAGE WAGE RATES AND HOURS OF LABOR

#### Three sets of tables

The results of our study in wage rates and hours of labor have been summarized in three sets of tables, namely, — (1) tables showing the average hourly and daily wage rates and the number of hours worked per day in different occupations of the various departments in various industries, (2) summary table of the average hourly and daily wage rates and number of hours worked per day in different industries, and (3) summary table showing the distribution of male, female, and child workers according to the average hourly wage rates. The first set consists of a number of separate tables for the various industries, and is valuable for an intensive study into the conditions peculiar to the individual industries. The averages for the individual industries, distinguishing among male, female, and child workers, in the first set of tables are summarized to form the table in the second set with the aim of presenting a comprehensive view of the various industries and appealing to general interest. From this table, the third table is constructed. The general averages for male, female, and child workers in all industries are computed. These tables serve to indicate the distribution of male, female, and child workers in all industries according to the average hourly wage rates, regardless of their industrial and occupational differences. This chapter will be specially devoted to an analysis of these three sets of tables. However, as the material we have covers only one year, our analysis cannot go further than to trace the changes and general tendencies in the movement of the wage rates and hours of labor.

#### Discussion on tables of wage rates and hours of labor

The first set consists of 21 tables. Each table provides information regarding the following items:

- (1) Occupational classification and processes of manufacture in various industries.
- (2) Distribution of workers on time and piece rates and of different occupations.
- (3) Total number of male, female, and child workers in various industries.
- (4) Frequency distribution of wage rates.
- (5) Average wage rate per hour, average number of hours worked per day, and average wage rate per day of the male, female, and child workers in different occupations of the various industries

- (6) Average wage rate per hour, average number of hours worked per day, and average wage rate per day of the time and piece workers in different occupations of the various industries.

The average wage rate per hour alone would suffice to show the wage level and is in itself a more satisfactory unit of measurement and comparison than the daily rate. But, the wage rates of workers in Shanghai are very low, varying from the highest rate of about fifteen cents per hour to as low as less than one cent. The hourly rates are therefore too minute to leave any definite impression with the readers. In converting the hourly rates into a daily basis, the daily rates are obtained by multiplying the hourly rates with the number of hours worked per day.

Modes of  
wage rates  
in different  
industries

The first set of tables shows beside the average wage rates the modes of wage rates in different industries. The mode, as different from the arithmetic average, is the position of greatest density, in other words, the predominant wage, i. e. that which applies to the greatest number of workers. In some industries, the position of modes is definite and conforms well to the bell shaped curve of a given frequency distribution. In others, the position is difficult to ascertain. In still others, there are no well-defined modes at all. In the following classes of laborers the mode is clearly defined: male workers in sawing, foundry, machinery, and ship-building industries; male and child workers in glass industry; male and female workers in soap industry; male, female, and child workers in match industry; male workers in enamel industry; male, female, and child workers in silk reeling and cotton spinning industries; female workers in silk weaving industry; male, female, and child workers in cotton weaving industry; male workers in tanning, flour, and oil industries; male and female workers in egg industry; child workers in tobacco industry; male and female workers in paper industry; and female workers in printing industry. More than one mode are found in the following classes: female workers in enamel industry; male workers in silk weaving industry; and female workers in tobacco industry. Child workers in enamel and printing industries are marked for their irregular distribution of frequencies, wherein no definite modes can be detected. As to male and female workers in the silk and cotton knitting industry, and male workers in tobacco and printing industries, the wage rates in the various occupations show no well-defined type; however, when the whole industry is taken up as a unit, regardless of occupational classification, the distribution of the average wage rates is quite regular and the modes are definitely located. The frequency distribution is especially irregular with workers on piece rates, where the number of hours worked and the units of output produced vary from worker to worker.

Again, no definitely defined tendency of concentration is shown in the wage rates of child workers, who are comparatively fewer in number and whose wage rates are irregularly distributed. Another outstanding feature lies in the wage rates of piece workers in the oil industry, where all laborers fall within the class from \$.085-\$.0949. This is due to the regulations governing the payment of wage in that industry. Following are tables showing the average hourly and daily wage rates and number of hours worked per day in different occupations of various industries:



TABLE 24

AVERAGE WAGE RATES AND NUMBER OF HOURS WORKED PER DAY IN DIFFERENT  
OCCUPATIONS IN THE SAWING INDUSTRY  
MALE WORKERS

| OCCUPATION   | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |                |                |                |                |                |                |                |                |                |                |                |                |                |                | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |
|--------------|-----------------------------|----------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------------------|-------------------------------------|---------------------------|
|              |                             | \$ —<br>.0349                                      | .035-<br>.0449 | .045-<br>.0549 | .055-<br>.0649 | .065-<br>.0749 | .075-<br>.0849 | .085-<br>.0949 | .095-<br>.1049 | .105-<br>.1149 | .115-<br>.1249 | .125-<br>.1349 | .135-<br>.1449 | .145-<br>.1549 | .155-<br>.1649 | .165-<br>.1749 |                            |                                     |                           |
| Sawyers      | T.W. <sup>1</sup> 1,035     | 13                                                 | 9              | 116            | 572            | 156            | 85             | 35             | 16             | 8              | 5              | 9              | 2              | 3              | 4              | 2              | \$ 0.065                   | 9                                   | \$ .0585                  |
| Mechanics    | T.W. 109                    |                                                    |                | 1              | 1              | 9              | 11             | 15             | 6              | 15             | 16             | 6              | 11             | 4              | 4              | 10             | 0.114                      | 9                                   | 1.026                     |
| Coolies      | T.W. 39                     | 3                                                  |                | 7              | 15             | 9              | 1              |                |                | 2              |                |                |                |                |                |                | 0.063                      | 9                                   | 0.567                     |
| <b>TOTAL</b> | <b>1,183</b>                | <b>16</b>                                          | <b>9</b>       | <b>124</b>     | <b>588</b>     | <b>174</b>     | <b>97</b>      | <b>50</b>      | <b>24</b>      | <b>25</b>      | <b>21</b>      | <b>15</b>      | <b>13</b>      | <b>7</b>       | <b>8</b>       | <b>12</b>      | <b>\$ 0.069</b>            | <b>9</b>                            | <b>\$ .621</b>            |

<sup>1</sup>T. W. denotes time workers and P. W. piece workers Likewise hereafter.

TABLE 25  
AVERAGE WAGE RATES AND NUMBER OF HOURS WORKED PER DAY IN DIFFERENT OCCUPATIONS  
IN THE FOUNDRY INDUSTRY  
MALE WORKERS

| OCCUPATION                                                   | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |       |       |
|--------------------------------------------------------------|-----------------------------|----------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------------|-------------------------------------|---------------------------|-------|-------|
|                                                              |                             | \$                                                 | .005- | .015- | .025- | .035- | .045- | .055- | .065- | .075- | .085- | .095- | .105- | .115- | .125- | .135- | .145- | .155- | .165- | .175- |                            |                                     |                           | .185- | .195- |
|                                                              |                             | .0149                                              | .0249 | .0349 | .0449 | .0549 | .0649 | .0749 | .0849 | .0949 | .1049 | .1149 | .1249 | .1349 | .1449 | .1549 | .1649 | .1749 | .1849 | .1949 |                            |                                     |                           | —     |       |
| Pattern makers }<br>Moulders }<br>Blacksmiths }<br>Coolies } | T.W. 3                      |                                                    |       |       |       |       |       |       | 1     |       |       | 1     |       |       |       |       |       |       |       |       |                            | \$                                  |                           | \$    |       |
|                                                              | T.W. 432                    | 1                                                  | 2     | 7     | 21    | 25    | 36    | 46    | 32    | 86    | 48    | 34    | 36    | 18    | 19    | 9     | 1     | 3     | 4     | 3     | 1                          | 0.107                               | 9                         | 0.963 |       |
|                                                              | T.W. 14                     |                                                    |       |       | 1     |       |       | 2     |       | 2     | 1     | 4     |       | 1     | 3     |       |       |       |       |       |                            | 0.991                               | 9                         | 0.819 |       |
|                                                              | T.W. 91                     |                                                    | 1     | 15    | 13    | 16    | 11    | 20    | 7     | 3     | 5     |       |       |       |       |       |       |       |       |       |                            | 0.104                               | 9                         | 0.936 |       |
|                                                              |                             |                                                    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                            | 0.057                               | 9                         | 0.513 |       |
| TOTAL                                                        | 540                         | 1                                                  | 3     | 22    | 35    | 41    | 47    | 68    | 40    | 91    | 54    | 39    | 36    | 20    | 22    | 9     | 1     | 3     | 4     | 3     | 1                          | \$                                  | 9                         | \$    |       |
|                                                              |                             |                                                    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                            | 0.086                               | 9                         | 0.774 |       |

WAGES AND HOURS OF LABOR

TABLE 26

AVERAGE WAGE RATES AND NUMBER OF HOURS WORKED PER DAY IN DIFFERENT  
OCCUPATIONS IN THE MACHINERY INDUSTRY  
MALE WORKERS

| OCCUPATION | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS PER DAY | AVERAGE WAGE RATE PER DAY |          |
|------------|-----------------------------|----------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------------------------|------------------------------|---------------------------|----------|
|            |                             | \$.005-.0149                                       | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 | .145-.1549 | .155-.1649 | .165-.1749 | .175-.1849 | .185-.1949 |                            |                              |                           | .195     |
| Fitters    | T.W. 1,204<br>P.W. 64       | 5                                                  |            | 10         | 52         | 57         | 129        | 105        | 140        | 213        | 143        | 131        | 86         | 63         | 22         | 11         | 13         | 8          | 4          | 5          | 7                          | \$ 0.091                     | 9                         | \$ 0.819 |
| Turners    | T.W. 912                    |                                                    | 2          | 3          | 16         | 37         | 66         | 88         | 116        | 104        | 127        | 128        | 64         | 45         | 17         | 10         | 6          | 1          | 12         | 4          | 6                          | 0.092                        | 9                         | 0.828    |
| Smiths     | T.W. 558                    |                                                    |            | 1          | 13         | 25         | 55         | 100        | 86         | 88         | 44         | 53         | 49         | 24         | 11         | 1          | 1          | 3          |            | 1          | 2                          | 0.089                        | 9                         | 0.801    |
| Coolies    | T.W. 220                    |                                                    |            | 12         | 57         | 10         | 95         | 22         | 11         | 7          |            | 3          | 2          |            |            |            |            |            | 1          |            |                            | 0.088                        | 9                         | 0.792    |
|            |                             |                                                    |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |                            | 0.057                        | 9                         | 0.513    |
| TOTAL      | 2,958                       | 5                                                  | 2          | 26         | 138        | 131        | 353        | 321        | 354        | 494        | 319        | 331        | 203        | 135        | 50         | 22         | 20         | 12         | 17         | 10         | 15                         | \$ 0.087                     | 9                         | \$ 0.783 |

AVERAGE WAGE RATES AND HOURS OF LABOR

TABLE 27  
 AVERAGE WAGE RATES AND NUMBER OF HOURS WORKED PER DAY IN DIFFERENT  
 OCCUPATIONS IN THE SHIP-BUILDING INDUSTRY  
 MALE WORKERS

| OCCUPATION     | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |           |           |            |            |            |            |           |            |            |            |            |           |            |           |           |           |           |           | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |                 |
|----------------|-----------------------------|----------------------------------------------------|-----------|-----------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|-----------|------------|-----------|-----------|-----------|-----------|-----------|----------------------------|-------------------------------------|---------------------------|-----------------|
|                |                             | \$ —                                               | .035-     | .045-     | .055-      | .065-      | .075-      | .085-      | .095-     | .105-      | .115-      | .125-      | .135-      | .145-     | .155-      | .165-     | .175-     | .185-     | .195-     | .205-     |                            |                                     |                           | .215            |
| Pattern makers | T.W. 96                     |                                                    |           |           | 6          | 12         | 4          | 1          | 2         | 5          | 3          | 5          | 13         | 8         | 12         | 10        | 4         | 5         |           | 2         | 4                          | \$ 0.135                            | 9                         | \$ 1.251        |
| Moulders       | " 205                       |                                                    | 15        | 4         | 44         | 29         | 11         | 16         | 6         | 14         | 17         | 11         | 7          | 7         | 6          | 7         | 6         | 1         |           |           | 4                          | 0.095                               | 9                         | 0.855           |
| Blacksmiths    | " 167                       |                                                    |           |           | 1          | 12         | 22         | 50         | 19        | 20         | 12         | 16         | 3          | 2         | 3          | 3         | 1         | 2         |           |           | 1                          | 0.103                               | 9                         | 0.927           |
| Coppersmiths   | " 227                       |                                                    | 1         | 2         | 8          | 3          | 6          | 5          | 3         | 19         | 21         | 35         | 47         | 20        | 26         | 8         | 9         | 2         | 3         | 2         | 7                          | 0.136                               | 9                         | 1.224           |
| Turners        | " 219                       |                                                    | 2         | 22        | 15         | 19         | 10         | 8          | 3         | 17         | 22         | 22         | 27         | 11        | 17         | 10        | 4         | 1         | 2         | 1         | 6                          | 0.115                               | 9                         | 1.035           |
| Fitters        | " 686                       | 1                                                  | 1         |           | 2          | 5          | 22         | 28         | 26        | 92         | 113        | 101        | 89         | 48        | 58         | 31        | 18        | 12        | 7         | 10        | 22                         | 0.135                               | 9                         | 1.215           |
| Electricians   | " 119                       | 1                                                  | 9         | 1         | 13         | 4          | 6          | 10         | 11        | 24         | 13         | 6          | 9          |           | 2          | 2         | 2         |           |           | 1         | 1                          | 0.105                               | 9                         | 0.945           |
| Engine men     | " 143                       |                                                    |           |           |            | 19         | 36         | 43         | 20        | 15         | 4          | 4          | ?          |           |            |           |           |           |           |           |                            | 0.091                               | 9                         | 0.819           |
| Coolies        | " 92                        | 15                                                 | 24        | 4         | 35         | 14         |            |            |           |            |            |            |            |           |            |           |           |           |           |           |                            | 0.051                               | 9                         | 0.459           |
| New hands      | " 86                        | 86                                                 |           |           |            |            |            |            |           |            |            |            |            |           |            |           |           |           |           |           |                            | 0.030                               | 9                         | 0.270           |
| <b>TOTAL</b>   | <b>2,040</b>                | <b>103</b>                                         | <b>52</b> | <b>33</b> | <b>124</b> | <b>117</b> | <b>117</b> | <b>161</b> | <b>90</b> | <b>206</b> | <b>205</b> | <b>200</b> | <b>197</b> | <b>96</b> | <b>124</b> | <b>71</b> | <b>44</b> | <b>23</b> | <b>13</b> | <b>16</b> | <b>48</b>                  | <b>\$ 0.113</b>                     | <b>9</b>                  | <b>\$ 1.017</b> |

TABLE 28

AVERAGE WAGE RATES AND NUMBER OF HOURS WORKED PER DAY IN DIFFERENT OCCUPATIONS IN THE GLASS MANUFACTURING INDUSTRY  
MALE WORKERS

| OCCUPATION                 | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |          |
|----------------------------|-----------------------------|----------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------------|-------------------------------------|---------------------------|----------|
|                            |                             | \$ —                                               | .035- | .045- | .055- | .065- | .075- | .085- | .095- | .105- | .115- | .125- | .135- | .145- | .155- | .165- | .175- | .185- | .195- | .205- |                            |                                     |                           | .215     |
| Blowing & grinding Coolies | T.W. 337                    |                                                    | 34    | 58    | 42    | 30    | 30    | 12    | 18    | 10    | 13    | 24    | 8     | 14    | 14    | 5     | 10    | 1     | 4     | 1     | 9                          | \$ 0.093                            | 8                         | \$ 0.744 |
|                            | T.W. 129                    |                                                    | 26    | 40    | 25    | 19    | 4     | 5     | 2     | 6     |       | 2     |       |       |       |       |       |       |       |       |                            | 0.060                               | 8                         | 0.480    |
| TOTAL                      | 466                         |                                                    | 60    | 98    | 67    | 49    | 34    | 17    | 20    | 16    | 13    | 26    | 8     | 14    | 14    | 5     | 10    | 1     | 4     | 1     | 9                          | \$ 0.084                            | 8                         | \$ 0.672 |

AVERAGE WAGE RATES AND HOURS OF LABOR

## CHILD WORKERS

| OCCUPATION                | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |            |            |            |            |            |            |            |            |            |            |            |            |            | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |                 |
|---------------------------|-----------------------------|----------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------------------------|-------------------------------------|---------------------------|-----------------|
|                           |                             | \$ .005-.0149                                      | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 |                            |                                     |                           | .145-           |
| Mould closing & conveying | T.W. 296                    |                                                    |            | 67         | 177        | 31         | 16         | 5          |            |            |            |            |            |            |            |                            | \$ 0.040                            | 8                         | \$ 0.320        |
| Melting & cooling         | T.W. 109                    |                                                    |            | 8          | 75         | 7          | 19         |            |            |            |            |            |            |            |            |                            | 0.043                               | 8                         | 0.344           |
| Coolies                   | T.W. 44                     |                                                    |            | 36         | 8          |            |            |            |            |            |            |            |            |            |            |                            | 0.032                               | 8                         | 0.256           |
| <b>TOTAL</b>              | <b>449</b>                  |                                                    |            | <b>111</b> | <b>260</b> | <b>38</b>  | <b>35</b>  | <b>5</b>   |            |            |            |            |            |            |            |                            | <b>\$ 0.040</b>                     | <b>8</b>                  | <b>\$ 0.320</b> |

TABLE 29

AVERAGE WAGE RATES AND NUMBER OF HOURS WORKED PER DAY IN DIFFERENT OCCUPATIONS  
OF THE VARIOUS DEPARTMENTS IN THE SOAP MAKING INDUSTRY  
MALE WORKERS

| DEPARTMENT AND OCCUPATION  | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |            |            |            |            |            |            |            |            |            |            |            |            |            | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |
|----------------------------|-----------------------------|----------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------------------------|-------------------------------------|---------------------------|
|                            |                             | \$.005-.0149                                       | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 |                            |                                     |                           |
| <i>Manufacturing Dept.</i> |                             |                                                    |            |            |            |            |            |            |            |            |            |            |            |            |            | \$                         |                                     | \$                        |
| Melting fats               | T.W. 42                     |                                                    |            |            | 3          | 39         |            |            |            |            |            |            |            |            |            | 0.049                      | 9½                                  | 0.451                     |
| Soap making                | " 299                       |                                                    | 6          | 22         | 206        | 34         | 18         | 6          | 3          | 1          |            | 2          | 1          |            | 0.053      | 9½                         | 0.483                               |                           |
| Glycerine refining         | " 29                        |                                                    |            |            | 1          | 27         | 1          |            |            |            |            |            |            |            | 0.060      | 9                          | 0.540                               |                           |
| Stamping                   | " 25                        |                                                    |            |            | 1          | 2          | 20         | 2          |            |            |            |            |            |            | 0.059      | 9                          | 0.531                               |                           |
| <i>Packing Dept.</i>       |                             |                                                    |            |            |            |            |            |            |            |            |            |            |            |            |            |                            |                                     |                           |
| Wrapping & casing          | " 26                        |                                                    |            | 4          | 17         | 3          | 2          |            |            |            |            |            |            |            | 0.051      | 9½                         | 0.464                               |                           |
| Case making                | " 3                         |                                                    |            | 2          | 1          |            |            |            |            |            |            |            |            |            | 0.043      | 9                          | 0.387                               |                           |
| <i>Mechanical Dept.</i>    |                             |                                                    |            |            |            |            |            |            |            |            |            |            |            |            |            |                            |                                     |                           |
| Mechanics                  | " 79                        |                                                    |            |            | 1          | 1          |            | 16         |            | 60         | 1          |            |            |            | 0.093      | 9                          | 0.837                               |                           |
| Repairers                  | " 22                        |                                                    |            |            |            |            | 10         | 4          | 3          | 5          |            |            |            |            | 0.071      | 9                          | 0.639                               |                           |
| Coolies                    | " 43                        |                                                    |            |            | 11         | 26         | 6          |            |            |            |            |            |            |            | 0.049      | 9½                         | 0.461                               |                           |
| <b>TOTAL</b>               | <b>568</b>                  |                                                    |            | 6          | 44         | 293        | 100        | 43         | 9          | 8          | 61         | 1          | 2          | 1          | \$         |                            | \$                                  |                           |
|                            |                             |                                                    |            |            |            |            |            |            |            |            |            |            |            |            | 0.059      | 9½                         | 0.543                               |                           |

AVERAGE WAGE RATES AND HOURS OF LABOR

## FEMALE WORKERS

| DEPARTMENT AND OCCUPATION  | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |            |            |            |            |            |            |            |            |            |            |            |            |            | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |       |          |
|----------------------------|-----------------------------|----------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------------------------|-------------------------------------|---------------------------|-------|----------|
|                            |                             | \$.005-.0149                                       | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 |                            |                                     |                           | .145— |          |
| <i>Manufacturing Dept.</i> |                             |                                                    |            |            |            |            |            |            |            |            |            |            |            |            |            |                            |                                     |                           |       |          |
| Soap making } T.W. 3       |                             |                                                    | 2          | 1          |            |            |            |            |            |            |            |            |            |            |            |                            |                                     | \$ 0.033                  | 9     | \$ 0.297 |
| Stamping } " 12            |                             |                                                    |            | 12         |            |            |            |            |            |            |            |            |            |            |            |                            |                                     | 0.040                     | 9     | 0.360    |
| Packing Dept. } " 197      |                             | 38                                                 | 60         | 70         | 16         | 7          | 4          | 1          | 1          |            |            |            |            |            |            |                            |                                     | 0.036                     | 9½    | 0.331    |
| Wrapping Case } " 19       |                             | 8                                                  | 8          | 1          | 2          |            |            |            |            |            |            |            |            |            |            |                            |                                     | 0.028                     | 9     | 0.252    |
| Mechanical Dept. } " 10    |                             | 7                                                  | 1          |            |            |            |            |            |            |            |            |            |            |            |            |                            |                                     | 0.031                     | 9     | 0.279    |
| Coolies } " 10             |                             |                                                    |            |            |            |            |            |            |            |            |            |            |            |            |            |                            |                                     |                           |       |          |
| TOTAL                      | 241                         |                                                    | 53         | 71         | 84         | 18         | 8          | 4          | 2          | 1          |            |            |            |            |            |                            |                                     | \$ 0.035                  | 9½    | \$ 0.322 |



TABLE 30

AVERAGE WAGE RATES AND NUMBER OF HOURS WORKED PER DAY IN DIFFERENT  
OCCUPATIONS IN THE MATCH MAKING INDUSTRY  
MALE WORKERS

| OCCUPATION                 | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |            |            |            |            |            |            |            |            |            |            |            |            |            | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |          |
|----------------------------|-----------------------------|----------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------------------------|-------------------------------------|---------------------------|----------|
|                            |                             | \$ .005-.0149                                      | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 |                            |                                     |                           | .145-    |
| Splint bundles } T.W. 19   |                             |                                                    | 8          | 2          |            | 9          |            |            |            |            |            |            |            |            |            |                            | \$ 0.045                            | 9 $\frac{3}{8}$           | \$ 0.423 |
| Frame filling } T.W. 18    |                             |                                                    |            |            | 3          | 8          | 7          |            |            |            |            |            |            |            |            |                            | 0.062                               | 9 $\frac{1}{10}$          | 0.564    |
|                            | P.W. 154                    |                                                    |            |            |            |            |            |            | 2          | 3          | 56         | 7          | 2          | 84         |            |                            | 0.127                               | 9 $\frac{3}{8}$           | 1.194    |
| Paraffin applying } T.W. 9 |                             |                                                    |            |            | 2          | 6          | 1          |            |            |            |            |            |            |            |            |                            | 0.060                               | 9 $\frac{3}{8}$           | 0.564    |
|                            | P.W. 29                     |                                                    |            |            |            | 8          | 7          |            | 3          |            |            | 2          | 1          | 2          | 4          | 2                          | 0.093                               | 9 $\frac{3}{8}$           | 0.893    |
| Head dipping } T.W. 53     |                             |                                                    |            | 2          | 14         | 17         | 12         | 6          | 2          |            |            |            |            |            |            |                            | 0.062                               | 9 $\frac{3}{8}$           | 0.583    |
|                            | P.W. 46                     |                                                    |            |            |            |            | 1          | 10         | 21         | 1          | 4          | 3          |            |            |            | 6                          | 0.099                               | 9 $\frac{3}{10}$          | 0.921    |
| Head drying } T.W. 11      |                             |                                                    |            |            | 6          | 3          | 1          | 1          |            |            |            |            |            |            |            |                            | 0.057                               | 9 $\frac{3}{8}$           | 0.536    |
|                            | P.W. 9                      |                                                    |            |            |            |            |            |            | 3          | 4          | 1          | 1          |            |            |            |                            | 0.100                               | 9 $\frac{3}{8}$           | 0.940    |
| Emptying } T.W. 34         |                             |                                                    |            | 3          | 14         | 15         | 2          |            |            |            |            |            |            |            |            |                            | 0.055                               | 9 $\frac{3}{8}$           | 0.513    |
|                            | P.W. 56                     |                                                    |            | 2          | 5          | 9          | 8          | 24         | 6          | 2          |            |            |            |            |            |                            | 0.073                               | 9 $\frac{3}{8}$           | 0.686    |
| Box filling } T.W. 28      |                             |                                                    | 4          | 1          | 1          | 9          | 11         | 2          |            |            |            |            |            |            |            |                            | 0.060                               | 9 $\frac{3}{10}$          | 0.558    |
|                            | P.W. 7                      |                                                    |            |            |            |            |            |            | 7          |            |            |            |            |            |            |                            | 0.090                               | 9                         | 0.810    |
| Box painting } T.W. 19     |                             |                                                    |            |            | 2          | 11         | 6          |            |            |            |            |            |            |            |            |                            | 0.062                               | 9 $\frac{1}{2}$           | 0.574    |

AVERAGE WAGE RATES AND HOURS OF LABOR

TABLE 30

AVERAGE WAGE RATES AND NUMBER OF HOURS WORKED PER DAY IN DIFFERENT  
OCCUPATIONS IN THE MATCH MAKING INDUSTRY  
MALE WORKERS  
(Continued)

| OCCUPATION                               | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |            |            |            |            |            |            |            |            |            |            |            |            |            | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |                  |          |
|------------------------------------------|-----------------------------|----------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------------------------|-------------------------------------|---------------------------|------------------|----------|
|                                          |                             | \$.005-.0149                                       | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 |                            |                                     |                           | .145-            |          |
| Box painting }<br>Packing }<br>Coolies } | P.W.                        | 5                                                  |            |            |            |            |            |            | 1          | 2          |            |            |            |            | 2          |                            |                                     | \$ 0.096                  | 7                | \$ 0.672 |
|                                          | T.W.                        | 12                                                 |            |            | 2          | 4          | 2          | 3          |            |            |            |            |            |            |            |                            |                                     | 0.058                     | 9 $\frac{3}{10}$ | 0.566    |
|                                          | T.W.                        | 50                                                 |            |            | 6          | 3          | 13         | 6          | 15         | 6          |            |            |            |            |            | 1                          |                                     | 0.069                     | 9 $\frac{1}{10}$ | 0.628    |
| <b>TOTAL</b>                             | <b>559</b>                  |                                                    |            | 12         | 18         | 54         | 110        | 64         | 60         | 53         | 10         | 66         | 12         | 4          | 88         | 8                          |                                     | \$ 0.086                  | 9 $\frac{1}{2}$  | \$ 0.803 |

FEMALE WORKERS

| OCCUPATION                                                                 | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |            |            |            |            |            |            |            |            |            |            |            |            |            | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |                  |       |
|----------------------------------------------------------------------------|-----------------------------|----------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------------------------|-------------------------------------|---------------------------|------------------|-------|
|                                                                            |                             | \$ .005-.0149                                      | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 |                            |                                     |                           | .145-            |       |
| Splint bundles<br>Frame emptying<br>Box filling<br>Box painting<br>Packing | T.W.                        | 11                                                 |            |            | 11         |            |            |            |            |            |            |            |            |            |            |                            | \$ 0.040                            | 10                        | \$ 0.400         |       |
|                                                                            | "                           | 12                                                 |            |            |            |            |            |            | 12         |            |            |            |            |            |            |                            | 0.080                               | 9                         | 0.720            |       |
|                                                                            | "                           | 674                                                | 149        | 258        | 157        | 106        |            | 1          | 1          | 2          |            |            |            |            |            |                            | 0.024                               | 9 $\frac{1}{10}$          | 0.218            |       |
|                                                                            | "                           | 25                                                 |            |            |            | 1          | 2          | 3          | 7          | 9          | 1          | 2          |            |            |            |                            |                                     | 0.073                     | 7 $\frac{3}{10}$ | 0.540 |
|                                                                            | "                           | 96                                                 | 8          | 27         | 44         | 8          | 9          |            |            |            |            |            |            |            |            |                            |                                     | 0.028                     | 8                | 0.224 |
| TOTAL                                                                      | 818                         | 157                                                | 285        | 201        | 126        | 11         | 3          | 8          | 22         | 3          | 2          |            |            |            |            |                            | \$ 0.027                            | 8 $\frac{9}{10}$          | \$ 0.240         |       |

AVERAGE WAGE RATES AND HOURS OF LABOR

### CHILD WORKERS

| OCCUPATION                  | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |            |            |            |            |            |            |            |            |            |            |            |            |            | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |          |
|-----------------------------|-----------------------------|----------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------------------------|-------------------------------------|---------------------------|----------|
|                             |                             | \$ .005-.0149                                      | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 |                            |                                     |                           | .145-    |
| Box filling<br>Box painting | P.W. 318                    | 25                                                 | 194        | 68         | 31         |            |            |            |            |            |            |            |            |            |            |                            | \$ 0.023                            | 8                         | \$ 0.184 |
|                             | T.W. 24                     |                                                    |            |            |            | 20         | 4          |            |            |            |            |            |            |            |            |                            | 0.052                               | 9                         | 0.468    |
| <b>TOTAL</b>                | <b>342</b>                  | <b>25</b>                                          | <b>194</b> | <b>68</b>  | <b>31</b>  | <b>20</b>  | <b>4</b>   |            |            |            |            |            |            |            |            |                            | \$ 0.025                            | 8 $\frac{1}{10}$          | \$ 0.203 |

TABLE 31

AVERAGE WAGE RATES AND NUMBER OF HOURS WORKED PER DAY IN DIFFERENT OCCUPATIONS OF THE VARIOUS DEPARTMENTS IN THE ENAMELLING INDUSTRY  
MALE WORKERS

| DEPARTMENT AND OCCUPATION                  | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |       |       |       |       |       |       |       |       |       |       |       |       |       | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |          |       |
|--------------------------------------------|-----------------------------|----------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------------|-------------------------------------|---------------------------|----------|-------|
|                                            |                             | \$                                                 | .005- | .015- | .025- | .035- | .045- | .055- | .065- | .075- | .085- | .095- | .105- | .115- | .125- |                            |                                     |                           | .135-    | .145- |
|                                            |                             | .0149                                              | .0249 | .0349 | .0449 | .0549 | .0649 | .0749 | .0849 | .0949 | .1049 | .1149 | .1249 | .1349 | .1449 |                            |                                     |                           | 1        |       |
| Plaque-making Dept. Shaping                | T.W. 174                    |                                                    | 3     | 7     | 12    | 36    | 60    | 23    | 14    | 12    | 4     | 3     |       |       |       |                            | \$ 0.061                            | 9 $\frac{2}{3}$           | \$ 0.573 |       |
|                                            | P.W. 13                     |                                                    |       |       | 1     | 5     | 1     | 3     | 2     |       |       |       |       |       |       |                            | 0.066                               | 9                         | 0.594    |       |
|                                            | T.W. 14                     |                                                    |       |       | J     |       |       | 2     |       | 3     | 2     | 1     | 1     | 1     | 1     | 2                          | 0.104                               | 9                         | 0.936    |       |
| Powder preparing }<br>Washing Enamelling } | T.W. 82                     |                                                    | 2     |       | 1     | 28    | 17    | 20    | 5     | 3     | 4     | 2     |       |       |       |                            | 0.063                               | 9 $\frac{2}{3}$           | 0.592    |       |
|                                            | T.W. 62                     | 1                                                  | 4     | 3     | 1     | 21    | 11    | 11    | 9     | 1     |       |       |       |       |       |                            | 0.057                               | 9 $\frac{2}{3}$           | 0.536    |       |
| Painting Dept.                             | T.W. 493                    |                                                    | 22    | 12    | 58    | 216   | 56    | 37    | 34    | 27    | 15    | 6     | 5     | 5     |       |                            | 0.058                               | 9 $\frac{1}{2}$           | 0.551    |       |
| Designing                                  | T.W. 13                     |                                                    | 8     | 3     | 1     | 1     |       |       |       |       |       |       |       |       |       |                            | 0.026                               | 10                        | 0.260    |       |
| Printing                                   | T.W. 41                     |                                                    | 2     | 14    | 1     | 14    | 5     |       |       |       |       | 1     | 1     |       |       |                            | 0.053                               | 9 $\frac{3}{10}$          | 0.493    |       |
| Coloring                                   | T.W. 23                     |                                                    |       |       |       | 10    | 1     | 10    | 1     | 1     |       |       |       |       |       |                            | 0.062                               | 9 $\frac{2}{5}$           | 0.595    |       |
| Packing Dept.                              |                             |                                                    |       |       |       |       |       |       |       |       |       |       |       |       |       |                            |                                     |                           |          |       |
| Checking                                   | T.W. 17                     |                                                    |       |       |       | 16    | 1     |       |       |       |       |       |       |       |       |                            | 0.051                               | 9                         | 0.459    |       |

AVERAGE WAGE RATES AND HOURS OF LABOR

TABLE 31

AVERAGE WAGE RATES AND NUMBER OF HOURS WORKED PER DAY IN DIFFERENT  
OCCUPATIONS OF THE VARIOUS DEPARTMENTS IN THE ENAMELLING INDUSTRY

## MALE WORKERS

(Continued)

| DEPARTMENT AND OCCUPATION            | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |                |                |                |                |                |                |                |                |                |                |                |                |                |            | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |
|--------------------------------------|-----------------------------|----------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------|----------------------------|-------------------------------------|---------------------------|
|                                      |                             | \$ .005-<br>.0149                                  | .015-<br>.0249 | .025-<br>.0349 | .035-<br>.0449 | .045-<br>.0549 | .055-<br>.0649 | .065-<br>.0749 | .075-<br>.0849 | .085-<br>.0949 | .095-<br>.1049 | .105-<br>.1149 | .115-<br>.1249 | .125-<br>.1349 | .135-<br>.1449 | .145-<br>— |                            |                                     |                           |
| Wrap-<br>ping &<br>boxing<br>Coolies | T.W. 36                     |                                                    |                |                |                | 30             | 2              | 2              | 1              | 1              |                |                |                |                |                |            | 0.054                      | 9                                   | 0.486                     |
|                                      | T.W. 39                     |                                                    |                |                | 2              | 24             | 4              | 7              | 2              |                |                |                |                |                |                |            | 0.056                      | 9                                   | 0.504                     |
| TOTAL                                | 1,007                       | 1                                                  | 41             | 39             | 78             | 401            | 158            | 115            | 68             | 48             | 25             | 13             | 7              | 6              | 3              | 4          | \$ 0.059                   | 9 $\frac{1}{2}$                     | \$ 0.555                  |

## FEMALE WORKERS

| DEPART-<br>MENT AND<br>OCCUPA-<br>TION  | NO. OF<br>WORKERS<br>INVESTI-<br>GATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |                |                |                |                |                |                |                |                |                |                |                |                |                | AVER-<br>AGE<br>WAGE<br>RATE<br>PER<br>HOUR | AVER-<br>AGE<br>NO. OF<br>HOURS<br>WORK-<br>ED PER<br>DAY | AVER-<br>AGE<br>WAGE<br>RATE<br>PER<br>DAY |              |          |    |              |
|-----------------------------------------|----------------------------------------|----------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------------------------------------|-----------------------------------------------------------|--------------------------------------------|--------------|----------|----|--------------|
|                                         |                                        | \$<br>.005-<br>.0149                               | .015-<br>.0249 | .025-<br>.0349 | .035-<br>.0449 | .045-<br>.0549 | .055-<br>.0649 | .065-<br>.0749 | .075-<br>.0849 | .085-<br>.0949 | .095-<br>.1049 | .105-<br>.1149 | .115-<br>.1249 | .125-<br>.1349 | .135-<br>.1449 |                                             |                                                           |                                            | .145<br>—    |          |    |              |
| <i>Painting<br/>Dept.</i>               |                                        |                                                    |                |                |                |                |                |                |                |                |                |                |                |                |                |                                             |                                                           |                                            |              |          |    |              |
| Design<br>apply-<br>ing } T.W.          | 52                                     |                                                    | 1              | 26             | 9              | 7              | 1              | 1              | 5              | 2              |                |                |                |                |                |                                             |                                                           | \$                                         | 0.043        | 9½       | \$ | 0.396        |
| "<br>Design-<br>ing } P.W.              | 14                                     |                                                    |                | 2              |                | 9              |                |                | 3              |                |                |                |                |                |                |                                             |                                                           |                                            | 0.054        | 7½       |    | 0.405        |
| "<br>Packing<br>Dept.<br>Coolies } T.W. | 101                                    | 1                                                  | 5              | 23             | 23             | 24             | 12             | 7              | 4              | 2              |                |                |                |                |                |                                             |                                                           |                                            | 0.046        | 9½       |    | 0.423        |
| "<br>Coolies } P.W.                     | 4                                      |                                                    |                |                |                | 4              |                |                |                |                |                |                |                |                |                |                                             |                                                           |                                            | 0.050        | 7½       |    | 0.375        |
| "<br>Coolies } T.W.                     | 15                                     |                                                    |                |                |                | 9              | 2              | 2              | 1              | 1              |                |                |                |                |                |                                             |                                                           |                                            | 0.059        | 9        |    | 0.531        |
| <b>TOTAL</b>                            | <b>186</b>                             | <b>1</b>                                           | <b>6</b>       | <b>51</b>      | <b>32</b>      | <b>53</b>      | <b>15</b>      | <b>10</b>      | <b>13</b>      | <b>5</b>       |                |                |                |                |                |                                             |                                                           | \$                                         | <b>0.047</b> | <b>9</b> | \$ | <b>0.423</b> |

AVERAGE WAGE RATES AND HOURS OF LABOR

## CHILD WORKERS

| DEPART-<br>MENT AND<br>OCCUPA-<br>TION       | NO. OF<br>WORKERS<br>INVESTI-<br>GATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |                |                |                |                |                |                |                |                |                |                |                |                |                | AVER-<br>AGE<br>WAGE<br>RATE<br>PER<br>HOUR | AVER-<br>AGE<br>NO. OF<br>HOURS<br>WORK<br>EA PER<br>DAY | AVER-<br>AGE<br>WAGE<br>RATE<br>PER<br>DAY |             |
|----------------------------------------------|----------------------------------------|----------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------------------------------------|----------------------------------------------------------|--------------------------------------------|-------------|
|                                              |                                        | \$<br>.005-<br>.0149                               | .015-<br>.0249 | .025-<br>.0349 | .035-<br>.0449 | .045-<br>.0549 | .055-<br>.0649 | .065-<br>.0749 | .075-<br>.0849 | .085-<br>.0949 | .095-<br>.1049 | .105-<br>.1149 | .115-<br>.1249 | .125-<br>.1349 | .135-<br>.1449 |                                             |                                                          |                                            | .145<br>—   |
| <i>Plaque-<br/>making<br/>Dept.</i>          | T.W. 13                                |                                                    |                | 2              | 11             |                |                |                |                |                |                |                |                |                |                |                                             | \$<br>0.038                                              | 9                                          | \$<br>0.342 |
| <i>Shaping<br/>Enamel-<br/>ing<br/>Dept.</i> | T.W. 46                                |                                                    |                | 23             | 23             |                |                |                |                |                |                |                |                |                |                |                                             | 0.035                                                    | 9                                          | 0.315       |
| <i>Enamel-<br/>ing</i>                       |                                        |                                                    |                |                |                |                |                |                |                |                |                |                |                |                |                |                                             |                                                          |                                            |             |
| <b>TOTAL</b>                                 | 59                                     |                                                    |                | 25             | 34             |                |                |                |                |                |                |                |                |                |                |                                             | \$<br>0.036                                              | 9                                          | \$<br>0.324 |

WAGES AND HOURS OF LABOR



TABLE 32

AVERAGE WAGE RATES AND NUMBER OF HOURS WORKED PER DAY IN DIFFERENT OCCUPATIONS  
IN THE SILK REELING INDUSTRY  
MALE WORKERS

| OCCUPATION | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |            |            |            |            |            |            |            |            |            |            |            |            |            |       | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |
|------------|-----------------------------|----------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------|----------------------------|-------------------------------------|---------------------------|
|            |                             | \$ .005-.0149                                      | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 | .145- |                            |                                     |                           |
| Mechanics  | T.W. 72                     |                                                    |            |            | 1          | 17         | 27         | 12         | 4          | 1          | 5          | 1          | 3          |            |            | 1     | \$ 0.068                   | 12                                  | \$ 0.816                  |
| Coolies    | T.W. 446                    |                                                    |            |            |            | 446        |            |            |            |            |            |            |            |            |            |       | 0.060                      | 12                                  | 0.720                     |
| TOTAL      | 518                         |                                                    |            |            | 1          | 17         | 473        | 12         | 4          | 1          | 5          | 1          | 3          |            |            | 1     | \$ 0.061                   | 12                                  | \$ 0.732                  |

AVERAGE WAGE RATES AND HOURS OF LABOR

FEMALE WORKERS

| OCCUPATION           | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |            |            |            |            |            |            |            |            |            |            |            |            |            | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |          |
|----------------------|-----------------------------|----------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------------------------|-------------------------------------|---------------------------|----------|
|                      |                             | \$.005-.0149                                       | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 |                            |                                     |                           | .145-    |
| Sorting Reeling      | T.W. 1,700                  |                                                    | 56         | 618        | 791        | 98         | 137        |            |            |            |            |            |            |            |            |                            | \$ 0.038                            | 11                        | \$ 0.418 |
| Regular Workers      | „ 9,214                     |                                                    |            | 2          | 42         | 4,786      | 4,384      |            |            |            |            |            |            |            |            |                            | 0.055                               | 11                        | 0.605    |
| Substitute Workers   | „ 2,351                     |                                                    |            | 485        | 1,551      | 306        | 9          |            |            |            |            |            |            |            |            |                            | 0.039                               | 11                        | 0.429    |
| Silk waste preparing | „ 853                       |                                                    |            | 548        | 305        |            |            |            |            |            |            |            |            |            |            |                            | 0.034                               | 11                        | 0.374    |
| Finishing            | „ 525                       |                                                    |            | 22         | 23         | 84         | 380        | 16         |            |            |            |            |            |            |            |                            | 0.057                               | 11                        | 0.627    |
| TOTAL                | 14,643                      |                                                    | 56         | 1,675      | 2,712      | 5,274      | 4,910      | 16         |            |            |            |            |            |            |            |                            | \$ 0.049                            | 11                        | \$ 0.539 |

## CHILD WORKERS

| OCCUPATION                                  | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |            |              |            |            |            |            |            |            |            |            |            |            |            |       | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |
|---------------------------------------------|-----------------------------|----------------------------------------------------|------------|--------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------|----------------------------|-------------------------------------|---------------------------|
|                                             |                             | \$ .005-.0149                                      | .015-.0249 | .025-.0349   | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 | .145- |                            |                                     |                           |
| Reeling Silk waste preparing }<br>Finishing | T.W. 4,662                  |                                                    | 16         | 4,456        | 189        | 1          |            |            |            |            |            |            |            |            |            |       | \$ 0.030                   | 11                                  | \$ 0.330                  |
|                                             | " 32                        |                                                    |            | 12           | 14         | 5          | 1          |            |            |            |            |            |            |            |            |       | 0.038                      | 11                                  | 0.418                     |
|                                             | " 179                       |                                                    | 22         | 70           | 83         | 2          | 2          |            |            |            |            |            |            |            |            |       | 0.034                      | 11                                  | 0.374                     |
| <b>TOTAL</b>                                | <b>4,873</b>                |                                                    | <b>38</b>  | <b>4,538</b> | <b>286</b> | <b>8</b>   | <b>3</b>   |            |            |            |            |            |            |            |            |       | \$ 0.030                   | 11                                  | \$ 0.330                  |

AVERAGE WAGE RATES AND HOURS OF LABOR





## FEMALE WORKERS

| DEPARTMENT AND OCCUPATION | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |                |                |                |                |                |                |                |                |                |                |                |                | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |                |            |    |       |
|---------------------------|-----------------------------|----------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------------------|-------------------------------------|---------------------------|----------------|------------|----|-------|
|                           |                             | \$ .005-<br>.0149                                  | .015-<br>.0249 | .025-<br>.0349 | .035-<br>.0449 | .045-<br>.0549 | .055-<br>.0649 | .065-<br>.0749 | .075-<br>.0849 | .085-<br>.0949 | .095-<br>.1049 | .105-<br>.1149 | .115-<br>.1249 | .125-<br>.1349 |                            |                                     |                           | .135-<br>.1449 | .145-<br>— |    |       |
| <i>Blowing Dept.</i>      | T.W. 26                     |                                                    |                | 6              | 15             | 5              |                |                |                |                |                |                |                |                |                            |                                     | \$                        | 0.040          | 12         | \$ | 0.480 |
| <i>Scutching Dept.</i>    | T.W. 56                     |                                                    | 3              | 31             | 21             | 1              |                |                |                |                |                |                |                |                |                            |                                     |                           | 0.034          | 12         |    | 0.408 |
| <i>Carding Dept.</i>      | T.W. 220                    |                                                    |                | 2              | 1              | 32             | 53             | 99             | 28             | 5              |                |                |                |                |                            |                                     |                           | 0.066          | 12         |    | 0.792 |
| <i>Fore-women, No. 1</i>  | T.W. 684                    |                                                    | 87             | 359            | 233            | 5              |                |                |                |                |                |                |                |                |                            |                                     |                           | 0.032          | 12         |    | 0.384 |
| <i>Drawing</i>            | P.W. 1,362                  |                                                    | 25             | 514            | 729            | 61             | 21             | 10             | 2              |                |                |                |                |                |                            |                                     |                           | 0.037          | 12         |    | 0.444 |
| <i>Roving</i>             | T.W. 1,339                  |                                                    | 194            | 438            | 396            | 273            | 26             | 2              | 2              | 5              |                |                |                |                | 1                          | 1                                   | 1                         | 0.037          | 12         |    | 0.444 |
| <i>Others</i>             | P.W. 3,799                  | 3                                                  | 116            | 744            | 1,054          | 915            | 226            | 56             | 38             | 30             | 16             |                |                |                |                            |                                     |                           | 0.043          | 12         |    | 0.516 |
| <i>Spinning Dept.</i>     | T.W. 6                      |                                                    |                | 4              | 2              |                |                |                |                |                |                |                |                |                |                            |                                     |                           | 0.033          | 12         |    | 0.396 |
| <i>Fore-women, No. 1</i>  | T.W. 273                    |                                                    |                |                |                | 31             | 84             | 120            | 23             | 5              | 9              |                |                |                | 1                          |                                     |                           | 0.067          | 12         |    | 0.804 |
| <i>Ring spinning</i>      | T.W. 1,062                  |                                                    | 4              | 315            | 377            | 320            | 20             | 21             | 5              |                |                |                |                |                |                            |                                     |                           | 0.041          | 12         |    | 0.492 |
| <i>New hands</i>          | P.W. 7,809                  | 333                                                | 759            | 1,968          | 2,582          | 1,775          | 290            | 72             | 17             | 7              | 6              |                |                |                |                            |                                     |                           | 0.038          | 12         |    | 0.456 |
|                           | T.W. 335                    | 88                                                 | 247            |                |                |                |                |                |                |                |                |                |                |                |                            |                                     |                           | 0.017          | 12         |    | 0.204 |
|                           | P.W. 124                    |                                                    | 124            |                |                |                |                |                |                |                |                |                |                |                |                            |                                     |                           | 0.020          | 12         |    | 0.240 |

FEMALE WORKERS

(Continued)

| DEPARTMENT AND OCCUPATION                | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |              |              |              |              |              |            |            |            |            |            |            |            |            | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY          |                 |
|------------------------------------------|-----------------------------|----------------------------------------------------|--------------|--------------|--------------|--------------|--------------|------------|------------|------------|------------|------------|------------|------------|------------|----------------------------|-------------------------------------|------------------------------------|-----------------|
|                                          |                             | \$ .005-.0149                                      | .015-.0249   | .025-.0349   | .035-.0449   | .045-.0549   | .055-.0649   | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 |                            |                                     |                                    | .145-           |
| Yarn testing }<br>Reeling<br>Dept.       | T.W. 35                     |                                                    |              | 4            | 28           | 3            |              |            |            |            |            |            |            |            |            |                            | \$ 0.040                            | 12                                 | \$ 0.480        |
| Fore-women, No. 1 }<br>Reeling<br>Others | T.W. 289                    |                                                    |              | 1            | 9            | 29           | 194          | 45         | 5          | 5          |            |            | 1          |            |            |                            | 0.061                               | 12                                 | 0.732           |
|                                          | P.W. 9,199                  | 234                                                | 1,286        | 3,077        | 2,700        | 1,271        | 413          | 123        | 54         | 28         |            |            |            |            |            |                            | 0.036                               | 11 $\frac{1}{2}$                   | 0.425           |
|                                          | T.W. 33                     |                                                    | 2            | 24           | 6            | 1            |              |            |            |            |            |            |            |            |            |                            | 0.032                               | 12                                 | 0.384           |
|                                          | P.W. 103                    |                                                    | 3            | 32           | 45           | 22           | 1            |            |            |            |            |            |            |            |            |                            | 0.039                               | 12                                 | 0.468           |
| Baling Dept.                             |                             |                                                    |              |              |              |              |              |            |            |            |            |            |            |            |            |                            |                                     |                                    |                 |
| Bundling                                 | T.W. 4                      |                                                    |              | 4            |              |              |              |            |            |            |            |            |            |            |            |                            | 0.030                               | 12                                 | 0.360           |
| Others                                   | T.W. 33                     |                                                    | 1            | 29           | 3            |              |              |            |            |            |            |            |            |            |            |                            | 0.031                               | 12                                 | 0.372           |
|                                          | P.W. 4                      |                                                    |              | 4            |              |              |              |            |            |            |            |            |            |            |            |                            | 0.030                               | 12                                 | 0.360           |
| Waste Cotton Dept.                       |                             |                                                    |              |              |              |              |              |            |            |            |            |            |            |            |            |                            |                                     |                                    |                 |
| Waste cotton picking }<br>Others         | T.W. 123                    |                                                    | 35           | 77           | 9            | 2            |              |            |            |            |            |            |            |            |            |                            | 0.028                               | 12                                 | 0.336           |
|                                          | P.W. 478                    | 11                                                 | 84           | 290          | 68           | 15           | 10           |            |            |            |            |            |            |            |            |                            | 0.030                               | 12                                 | 0.360           |
| Mechanical Dept.                         | T.W. 9                      |                                                    |              | 8            | 1            |              |              |            |            |            |            |            |            |            |            |                            | 0.031                               | 12                                 | 0.372           |
| Coolies                                  | T.W. 169                    |                                                    | 77           | 72           | 19           | 1            |              |            |            |            |            |            |            |            |            |                            | 0.027                               | 12                                 | 0.324           |
| <b>TOTAL</b>                             | <b>27,574</b>               | <b>669</b>                                         | <b>3,047</b> | <b>8,003</b> | <b>8,898</b> | <b>4,762</b> | <b>1,338</b> | <b>548</b> | <b>174</b> | <b>85</b>  | <b>42</b>  | <b>6</b>   | <b>1</b>   | <b>1</b>   |            |                            | <b>\$ 0.038</b>                     | <b>11<math>\frac{9}{10}</math></b> | <b>\$ 0.452</b> |

AVERAGE WAGE RATES AND HOURS OF LABOR





**TABLE 34**  
**AVERAGE WAGE RATES AND NUMBER OF HOURS WORKED PER DAY IN DIFFERENT**  
**OCCUPATIONS OF THE VARIOUS DEPARTMENTS IN THE SILK WEAVING INDUSTRY**  
**MALE WORKERS**

| DEPARTMENT AND OCCUPATION | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |            |            |           |           |           |           |            |            |           |           |           |           |           |           | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |
|---------------------------|-----------------------------|----------------------------------------------------|------------|------------|-----------|-----------|-----------|-----------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|----------------------------|-------------------------------------|---------------------------|
|                           |                             | \$.01-.029                                         | .03-.049   | .05-.069   | .07-.089  | .09-.109  | .11-.129  | .13-.149  | .15-.169   | .17-.189   | .19-.209  | .21-.229  | .23-.249  | .25-.269  | .27-.289  | .29-      |                            |                                     |                           |
| <i>Warping Dept.</i>      |                             |                                                    |            |            |           |           |           |           |            |            |           |           |           |           |           |           | \$                         |                                     | \$                        |
| Winding T.W.              | 61                          | 9                                                  | 19         | 25         | 2         | 4         | 2         |           |            |            |           |           |           |           |           |           | 0.053                      | 10 $\frac{7}{10}$                   | 0.567                     |
| Sizing T.W.               | 116                         | 15                                                 | 33         | 63         | 5         |           |           |           |            |            |           |           |           |           |           |           | 0.050                      | 10 $\frac{1}{10}$                   | 0.530                     |
| Warping T.W.              | 58                          | 8                                                  | 14         | 6          | 11        | 1         | 1         | 1         | 4          | 1          | 5         | 5         |           |           |           |           | 0.096                      | 10 $\frac{6}{10}$                   | 1.018                     |
| Knotting T.W.             | 14                          |                                                    | 3          | 6          | 1         |           | 2         |           | 1          | 1          |           |           |           |           |           |           | 0.081                      | 10 $\frac{6}{10}$                   | 0.859                     |
| <i>Quilling Dept.</i>     |                             |                                                    |            |            |           |           |           |           |            |            |           |           |           |           |           |           |                            |                                     |                           |
| Doubling T.W.             | 7                           |                                                    | 5          | 2          |           |           |           |           |            |            |           |           |           |           |           |           | 0.046                      | 10 $\frac{1}{2}$                    | 0.483                     |
| Spinning T.W.             | 38                          | 7                                                  | 15         | 16         |           |           |           |           |            |            |           |           |           |           |           |           | 0.045                      | 10 $\frac{1}{2}$                    | 0.473                     |
| Quilling T.W.             | 16                          | 3                                                  | 4          | 8          |           | 1         |           |           |            |            |           |           |           |           |           |           | 0.050                      | 10 $\frac{6}{10}$                   | 0.530                     |
| <i>Weaving Dept.</i>      |                             |                                                    |            |            |           |           |           |           |            |            |           |           |           |           |           |           |                            |                                     |                           |
| Weaving T.W.              | 22                          |                                                    | 17         | 4          | 1         |           |           |           |            |            |           |           |           |           |           |           | 0.045                      | 10 $\frac{6}{10}$                   | 0.477                     |
| P.W.                      | 617                         |                                                    | 12         | 18         | 47        | 48        | 44        | 88        | 123        | 100        | 38        | 30        | 24        | 17        | 11        | 17        | 0.159                      | 10 $\frac{4}{10}$                   | 1.654                     |
| <i>Mechanical Dept.</i>   |                             |                                                    |            |            |           |           |           |           |            |            |           |           |           |           |           |           |                            |                                     |                           |
| Mechanics } T.W.          | 6                           |                                                    | 2          | 2          | 2         |           |           |           |            |            |           |           |           |           |           |           | 0.060                      | 11                                  | 0.660                     |
| Coolies } T.W.            | 47                          | 10                                                 | 10         | 12         | 13        | 1         | 1         |           |            |            |           |           |           |           |           |           | 0.055                      | 10 $\frac{1}{2}$                    | 0.578                     |
| <b>TOTAL</b>              | <b>1,002</b>                | <b>52</b>                                          | <b>134</b> | <b>162</b> | <b>82</b> | <b>55</b> | <b>50</b> | <b>89</b> | <b>128</b> | <b>102</b> | <b>43</b> | <b>35</b> | <b>24</b> | <b>17</b> | <b>11</b> | <b>18</b> | <b>\$ 0.120</b>            | <b>10<math>\frac{1}{2}</math></b>   | <b>\$ 1.260</b>           |

AVERAGE WAGE RATES AND HOURS OF LABOR

## FEMALE WORKERS

| DEPARTMENT AND OCCUPATION | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |            |            |           |           |           |           |           |          |           |          |          |          |          | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY         |                 |
|---------------------------|-----------------------------|----------------------------------------------------|------------|------------|-----------|-----------|-----------|-----------|-----------|----------|-----------|----------|----------|----------|----------|----------------------------|-------------------------------------|-----------------------------------|-----------------|
|                           |                             | \$.01-.029                                         | .03-.049   | .05-.069   | .07-.089  | .09-.109  | .11-.129  | .13-.149  | .15-.169  | .17-.189 | .19-.209  | .21-.229 | .23-.249 | .25-.269 | .27-.289 |                            |                                     |                                   | .29-            |
| <i>Warping Dept.</i>      |                             |                                                    |            |            |           |           |           |           |           |          |           |          |          |          |          |                            | \$                                  |                                   | \$              |
| Winding                   | T.W. 159                    | 43                                                 | 76         | 38         | 2         |           |           |           |           |          |           |          |          |          |          |                            | 0.040                               | 10 $\frac{1}{2}$                  | 0.420           |
| Doubling                  | " 19                        |                                                    | 12         | 6          | 1         |           |           |           |           |          |           |          |          |          |          |                            | 0.048                               | 10 $\frac{1}{2}$                  | 0.504           |
| Warping                   | " 43                        | 1                                                  | 22         | 16         | 4         |           |           |           |           |          |           |          |          |          |          |                            | 0.051                               | 11                                | 0.561           |
| <i>Quilling Dept.</i>     |                             |                                                    |            |            |           |           |           |           |           |          |           |          |          |          |          |                            |                                     |                                   |                 |
| Winding                   | " 11                        |                                                    | 10         | 1          |           |           |           |           |           |          |           |          |          |          |          |                            | 0.042                               | 10 $\frac{1}{2}$                  | 0.441           |
| Doubling                  | " 9                         |                                                    | 6          | 3          |           |           |           |           |           |          |           |          |          |          |          |                            | 0.047                               | 10 $\frac{1}{2}$                  | 0.494           |
| Quilling                  | " 51                        | 3                                                  | 28         | 16         | 4         |           |           |           |           |          |           |          |          |          |          |                            | 0.048                               | 10 $\frac{1}{2}$                  | 0.504           |
| <i>Weaving Dept.</i>      |                             |                                                    |            |            |           |           |           |           |           |          |           |          |          |          |          |                            |                                     |                                   |                 |
| Weaving                   | P.W. 274                    | 1                                                  | 2          | 21         | 30        | 39        | 64        | 49        | 24        | 9        | 16        | 5        | 3        | 5        | 5        | 1                          | 0.130                               | 10 $\frac{1}{4}$                  | 1.333           |
| <b>TOTAL</b>              | <b>566</b>                  | <b>48</b>                                          | <b>156</b> | <b>101</b> | <b>41</b> | <b>39</b> | <b>64</b> | <b>49</b> | <b>24</b> | <b>9</b> | <b>16</b> | <b>5</b> | <b>3</b> | <b>5</b> | <b>5</b> | <b>1</b>                   | <b>\$ 0.086</b>                     | <b>10<math>\frac{1}{2}</math></b> | <b>\$ 0.894</b> |

TABLE 35

AVERAGE WAGE RATES AND NUMBER OF HOURS WORKED PER DAY IN DIFFERENT OCCUPATIONS  
OF THE VARIOUS DEPARTMENTS IN THE COTTON WEAVING INDUSTRY  
MALE WORKERS

| DEPARTMENT AND OCCUPATION             | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY       |                                 |       |
|---------------------------------------|-----------------------------|----------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------------------------|-------------------------------------|---------------------------------|---------------------------------|-------|
|                                       |                             | \$ .005-.0149                                      | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 | .145-.1549 | .155-.1649 | .165-.1749 | .175-.1849 |                            |                                     |                                 | .185-.1949                      | .195- |
| <i>Warping Dept.</i>                  |                             |                                                    |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |                            | \$                                  |                                 | \$                              |       |
| Foremen                               | T.W. 7                      |                                                    |            |            |            | 2          | 1          | 3          |            |            | 1          |            |            |            |            |            |            |            |            |                            | 0.077                               | 12                              | 0.924                           |       |
| Warping                               | T.W. 70                     |                                                    | 1          | 17         | 16         | 20         | 11         | 1          | 4          |            |            |            |            |            |            |            |            |            |            | 0.047                      | 10 <sup>1</sup> / <sub>10</sub>     | 0.475                           |                                 |       |
| Warp                                  |                             |                                                    |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |                            |                                     |                                 |                                 |       |
| Winding                               | T.W. 48                     |                                                    |            | 2          | 44         | 2          |            |            |            |            |            |            |            |            |            |            |            |            |            | 0.040                      | 12                                  | 0.480                           |                                 |       |
| Sizing                                |                             |                                                    |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |                            |                                     |                                 |                                 |       |
|                                       | T.W. 54                     |                                                    |            | 2          | 8          | 27         | 5          | 9          | 2          |            | 1          |            |            |            |            |            |            |            |            | 0.054                      | 10 <sup>3</sup> / <sub>10</sub>     | 0.581                           |                                 |       |
|                                       | P.W. 11                     |                                                    |            |            |            | 5          | 3          | 1          | 2          |            |            |            |            |            |            |            |            |            |            | 0.062                      | 11                                  | 0.682                           |                                 |       |
| Others                                | T.W. 188                    |                                                    | 1          | 17         | 132        | 33         | 3          | 1          | 1          |            |            |            |            |            |            |            |            |            |            | 0.041                      | 11 <sup>1</sup> / <sub>2</sub>      | 0.484                           |                                 |       |
| <i>Weaving Dept.</i>                  |                             |                                                    |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |                            |                                     |                                 |                                 |       |
| Foremen                               | T.W. 47                     |                                                    |            |            | 4          |            | 2          | 40         |            |            |            | 1          |            |            |            |            |            |            |            | 0.068                      | 12                                  | 0.816                           |                                 |       |
| Weaving                               | T.W. 134                    | 1                                                  |            | 39         | 29         | 20         | 7          | 20         | 9          | 5          |            | 1          |            | 1          |            | 2          |            |            |            | 0.051                      | 10 <sup>3</sup> / <sub>10</sub>     | 0.525                           |                                 |       |
|                                       | P.W. 776                    | 2                                                  | 9          | 22         | 40         | 71         | 125        | 99         | 70         | 35         | 40         | 27         | 20         | 22         | 16         | 46         | 16         | 17         | 18         | 15                         | 66                                  | 0.097                           | 10 <sup>3</sup> / <sub>10</sub> | 1.057 |
| Others                                | T.W. 57                     |                                                    |            | 6          | 43         | 7          |            |            |            | 1          |            |            |            |            |            |            |            |            |            |                            | 0.041                               | 12 <sup>1</sup> / <sub>10</sub> | 0.496                           |       |
| <i>Finishing and Mechanical Dept.</i> |                             |                                                    |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |                            |                                     |                                 |                                 |       |
| Finishing                             | T.W. 347                    |                                                    |            | 35         | 135        | 105        | 40         | 23         | 7          | 1          | 1          |            |            |            |            |            |            |            |            |                            | 0.047                               | 10 <sup>3</sup> / <sub>10</sub> | 0.484                           |       |
|                                       | P.W. 65                     |                                                    |            | 2          | 30         | 10         | 2          | 1          | 2          | 2          | 4          | 1          |            | 1          | 2          |            | 8          |            |            |                            | 0.069                               | 11 <sup>1</sup> / <sub>2</sub>  | 0.794                           |       |

AVERAGE WAGE RATES AND HOURS OF LABOR

TABLE 35  
 AVERAGE WAGE RATES AND NUMBER OF HOURS WORKED PER DAY IN DIFFERENT OCCUPATIONS  
 OF THE VARIOUS DEPARTMENTS IN THE COTTON WEAVING INDUSTRY  
 MALE WORKERS

(Continued)

| DEPART-<br>MENT AND<br>OCCUPA-<br>TION    | NO. OF<br>WORKERS<br>INVESTI-<br>GATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                | AVER-<br>AGE<br>WAGE<br>RATE<br>PER<br>HOUR | AVER-<br>AGE<br>NO. OF<br>HOURS<br>WORK-<br>ED PER<br>DAY | AVER-<br>AGE<br>WAGE<br>RATE<br>PER<br>DAY |                  |          |
|-------------------------------------------|----------------------------------------|----------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------------------------------------|-----------------------------------------------------------|--------------------------------------------|------------------|----------|
|                                           |                                        | \$.005-<br>.0149                                   | .015-<br>.0249 | .025-<br>.0349 | .035-<br>.0449 | .045-<br>.0549 | .055-<br>.0649 | .065-<br>.0749 | .075-<br>.0849 | .085-<br>.0949 | .095-<br>.1049 | .105-<br>.1149 | .115-<br>.1249 | .125-<br>.1349 | .135-<br>.1449 | .145-<br>.1549 | .155-<br>.1649 | .165-<br>.1749 | .175-<br>.1849 | .185-<br>.1949 |                                             |                                                           |                                            | .195<br>—        |          |
| Mechan-<br>ics and<br>smiths }<br>Coolies | T.W. 497                               |                                                    | 7              | 48             | 131            | 98             | 78             | 44             | 49             | 10             | 8              | 5              | 4              | 1              | 6              |                |                |                | 2              |                | 4                                           | 2                                                         | \$ 0.058                                   | 11 $\frac{3}{8}$ | \$ 0.673 |
|                                           | T.W. 257                               |                                                    | 9              | 54             | 114            | 45             | 16             | 9              | 7              | 2              | 1              |                |                |                |                |                |                |                |                |                |                                             |                                                           | 0.043                                      | 11 $\frac{1}{2}$ | 0.482    |
| TOTAL                                     | 2,558                                  | 3                                                  | 27             | 244            | 726            | 443            | 294            | 249            | 150            | 62             | 55             | 35             | 25             | 25             | 26             | 46             | 24             | 19             | 18             | 19             | 68                                          | \$ 0.065                                                  | 11 $\frac{1}{10}$                          | \$ 0.722         |          |



FEMALE WORKERS—(Continued)

| DEPARTMENT AND OCCUPATION             | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |                                 |            |
|---------------------------------------|-----------------------------|----------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------------------------|-------------------------------------|---------------------------|---------------------------------|------------|
|                                       |                             | \$.005-.0149                                       | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 | .145-.1549 | .155-.1649 | .165-.1749 |                            |                                     |                           | .175-.1849                      | .185-.195— |
| <i>Finishing and Mechanical Dept.</i> |                             |                                                    |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |                            |                                     | \$                        |                                 | \$         |
| Finishing                             | T.W. 46                     |                                                    |            | 1          | 37         | 8          |            |            |            |            |            |            |            |            |            |            |            |            |                            |                                     | 0.042                     | 11 <sup>3</sup> / <sub>10</sub> | 0.475      |
|                                       | P.W. 8                      |                                                    |            | 2          |            |            |            | 1          | 2          |            |            | 3          |            |            |            |            |            |            |                            |                                     | 0.074                     | 12                              | 0.888      |
| Coolies                               | T.W. 14                     |                                                    |            | 12         | 2          |            |            |            |            |            |            |            |            |            |            |            |            |            |                            |                                     | 0.031                     | 12                              | 0.372      |
| <b>TOTAL</b>                          | <b>7,128</b>                | 109                                                | 581        | 1,159      | 1,644      | 1,581      | 927        | 599        | 306        | 133        | 47         | 39         |            | 2          | 1          |            |            |            |                            |                                     | \$ 0.047                  | 11 <sup>3</sup> / <sub>5</sub>  | \$ 0.545   |



TABLE 36  
 AVERAGE WAGE RATES AND NUMBER OF HOURS WORKED PER DAY IN DIFFERENT OCCUPATIONS  
 OF THE VARIOUS DEPARTMENTS IN THE SILK AND COTTON KNITTING INDUSTRY  
 MALE WORKERS

| DEPARTMENT AND OCCUPATION           | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |             |             |             |             |             |             |             |             |             |             |             |             |             | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |                   |          |
|-------------------------------------|-----------------------------|----------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------------------|-------------------------------------|---------------------------|-------------------|----------|
|                                     |                             | \$ — .0249                                         | .025- .0349 | .035- .0449 | .045- .0549 | .055- .0649 | .065- .0749 | .075- .0849 | .085- .0949 | .095- .1049 | .105- .1149 | .115- .1249 | .125- .1349 | .135- .1449 | .145- .1549 |                            |                                     |                           | .155 —            |          |
| <i>Knitting Dept.</i>               |                             |                                                    |             |             |             |             |             |             |             |             |             |             |             |             |             |                            |                                     |                           |                   |          |
| Hand machine knitting } T.W. 11     |                             |                                                    | 1           | 2           |             | 1           | 1           | 1           | 1           |             | 4           |             |             |             |             |                            |                                     | \$ 0.077                  | 9 $\frac{1}{10}$  | \$ 0.701 |
| P.W. 82                             |                             |                                                    |             |             | 1           |             |             | 6           | 3           | 19          | 9           | 15          | 1           | 13          | 9           | 7                          |                                     | 0.119                     | 8 $\frac{3}{8}$   | 1.047    |
| Electric machine knitting } T.W. 15 |                             |                                                    |             | 2           | 2           | 2           |             | 1           | 1           | 2           | 3           | 1           |             |             | 1           |                            |                                     | 0.085                     | 10                | 0.850    |
| P.W. 8                              |                             |                                                    |             |             | 3           | 2           |             | 1           |             |             |             | 1           |             |             |             | 1                          |                                     | 0.075                     | 11                | 0.825    |
| Looping } T.W. 5                    |                             |                                                    |             |             |             |             |             | 2           | 2           |             | 1           |             |             |             |             |                            |                                     | 0.090                     | 10 $\frac{1}{2}$  | 0.918    |
| P.W. 9                              |                             |                                                    |             | 1           |             |             |             | 2           |             | 1           |             | 1           | 3           |             |             | 1                          |                                     | 0.107                     | 10                | 1.070    |
| T.W. 14                             |                             |                                                    |             |             | 1           | 5           | 5           | 2           | 1           |             |             |             |             |             |             |                            |                                     | 0.068                     | 10                | 0.680    |
| <i>Others</i>                       |                             |                                                    |             |             |             |             |             |             |             |             |             |             |             |             |             |                            |                                     |                           |                   |          |
| <i>Finishing Dept.</i>              |                             |                                                    |             |             |             |             |             |             |             |             |             |             |             |             |             |                            |                                     |                           |                   |          |
| Dyeing and drying } T.W. 58         |                             | 1                                                  | 16          | 3           | 28          | 5           | 1           | 3           | 1           |             |             |             |             |             |             |                            |                                     | 0.047                     | 10 $\frac{1}{2}$  | 0.494    |
| Finishing and pressing } T.W. 93    |                             |                                                    | 4           | 6           | 28          | 26          | 16          | 5           |             |             | 6           | 2           |             |             |             |                            |                                     | 0.062                     | 10 $\frac{1}{2}$  | 0.651    |
| P.W. 161                            |                             | 5                                                  | 7           | 13          | 7           | 14          | 7           | 13          | 7           | 3           | 9           | 27          | 11          | 10          | 19          | 9                          |                                     | 0.098                     | 10 $\frac{3}{10}$ | 1.009    |



TABLE 36

AVERAGE WAGE RATES AND NUMBER OF HOURS WORKED PER DAY IN DIFFERENT OCCUPATIONS  
OF THE VARIOUS DEPARTMENTS IN THE SILK AND COTTON KNITTING INDUSTRY  
MALE WORKERS

(Continued)

| DEPARTMENT AND OCCUPATION | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |             |             |             |             |             |             |             |             |             |             |             |             |             |        | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |
|---------------------------|-----------------------------|----------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------|----------------------------|-------------------------------------|---------------------------|
|                           |                             | \$ — .0249                                         | .025- .0349 | .035- .0449 | .045- .0549 | .055- .0649 | .065- .0749 | .075- .0849 | .085- .0949 | .095- .1049 | .105- .1149 | .115- .1249 | .125- .1349 | .135- .1449 | .145- .1549 | .155 — |                            |                                     |                           |
| Assorting                 | T.W. 24                     | 5                                                  | 3           | 9           | 5           | 2           |             |             |             |             |             |             |             |             |             |        | \$ 0.038                   | 10                                  | \$ 0.380                  |
|                           | P.W. 13                     |                                                    | 2           | 4           | 1           |             |             |             |             |             |             |             |             |             |             |        | 0.086                      | 9½                                  | 0.817                     |
| Mechanics                 | T.W. 78                     | 2                                                  | 19          | 7           | 7           | 6           | 10          | 4           | 6           | 5           | 1           | 3           | 2           | 1           | 3           | 6      | 0.067                      | 10¼                                 | 0.720                     |
| TOTAL                     | 572                         | 13                                                 | 52          | 47          | 83          | 63          | 41          | 39          | 22          | 30          | 34          | 49          | 17          | 26          | 34          | 22     | \$ 0.081                   | 10½                                 | \$ 0.818                  |

AVERAGE WAGE RATES AND HOURS OF LABOR

## FEMALE WORKERS

| DEPARTMENT AND OCCUPATION           | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |                |                |                |                |                |                |                |                |                |                |                |                |                |           | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY        |    |              |
|-------------------------------------|-----------------------------|----------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------|----------------------------|-------------------------------------|----------------------------------|----|--------------|
|                                     |                             | \$—<br>.0249                                       | .025-<br>.0349 | .035-<br>.0449 | .045-<br>.0549 | .055-<br>.0649 | .065-<br>.0749 | .075-<br>.0849 | .085-<br>.0949 | .095-<br>.1049 | .105-<br>.1149 | .115-<br>.1249 | .125-<br>.1349 | .135-<br>.1449 | .145-<br>.1549 | .155<br>— |                            |                                     |                                  |    |              |
| <i>Winding Dept.</i>                |                             |                                                    |                |                |                |                |                |                |                |                |                |                |                |                |                |           | \$                         |                                     | \$                               |    |              |
| Cone winding } T.W. 35              | 2                           | 1                                                  | 8              | 15             | 8              | 1              |                |                |                |                |                |                |                |                |                |           | 0.057                      | 9 $\frac{3}{8}$                     | 0.547                            |    |              |
| P.W. 267                            | 47                          | 30                                                 | 25             | 43             | 46             | 48             | 17             | 3              | 3              | 1              |                |                |                |                |                | 4         | 0.052                      | 9 $\frac{1}{2}$                     | 0.494                            |    |              |
| Silk winding } T.W. 30              | 4                           | 9                                                  | 2              | 7              | 8              |                |                |                |                |                |                |                |                |                |                |           | 0.042                      | 9 $\frac{3}{8}$                     | 0.406                            |    |              |
| P.W. 24                             |                             | 2                                                  | 14             | 7              | 1              |                |                |                |                |                |                |                |                |                |                |           | 0.043                      | 9                                   | 0.387                            |    |              |
| <i>Knitting Dept.</i>               |                             |                                                    |                |                |                |                |                |                |                |                |                |                |                |                |                |           |                            |                                     |                                  |    |              |
| Hand machine } T.W. 34              | 9                           | 6                                                  | 6              | 3              | 4              | 3              | 3              |                |                |                |                |                |                |                |                |           | 0.042                      | 10                                  | 0.420                            |    |              |
| P.W. 750                            | 48                          | 52                                                 | 50             | 115            | 96             | 58             | 65             | 54             | 33             | 68             | 49             | 6              | 13             | 4              | 39             |           | 0.075                      | 9 $\frac{3}{8}$                     | 0.705                            |    |              |
| Electric machine knitting } P.W. 65 | 1                           | 2                                                  | 2              | 4              | 3              | 5              | 9              | 6              | 10             | 6              | 2              | 4              | 3              | 1              | 7              |           | 0.096                      | 9 $\frac{9}{10}$                    | 0.950                            |    |              |
| Looping } T.W. 29                   | 10                          | 2                                                  | 11             | 3              | 2              | 1              |                |                |                |                |                |                |                |                |                |           | 0.038                      | 10                                  | 0.380                            |    |              |
| P.W. 227                            | 12                          | 25                                                 | 27             | 24             | 3              | 18             | 13             | 7              | 13             | 14             | 13             | 14             | 2              | 7              | 8              |           | 0.074                      | 10 $\frac{1}{4}$                    | 0.759                            |    |              |
| <i>Finishing Dept.</i>              |                             |                                                    |                |                |                |                |                |                |                |                |                |                |                |                |                |           |                            |                                     |                                  |    |              |
| Dyeing and drying } T.W. 22         | 2                           | 13                                                 | 1              | 3              | 1              |                | 1              | 1              |                |                |                |                |                |                |                |           | 0.039                      | 9 $\frac{7}{10}$                    | 0.378                            |    |              |
| Finishing and pressing } T.W. 72    | 17                          | 21                                                 | 17             | 8              | 3              | 4              | 2              |                |                |                |                |                |                |                |                |           | 0.037                      | 10 $\frac{3}{8}$                    | 0.385                            |    |              |
| P.W. 31                             | 2                           | 3                                                  | 2              | 7              | 5              | 3              | 5              | 1              | 1              | 1              |                | 1              |                |                |                |           | 0.061                      | 9 $\frac{1}{2}$                     | 0.580                            |    |              |
| Assorting } T.W. 8                  | 4                           | 2                                                  | 1              | 1              |                |                |                |                |                |                |                |                |                |                |                |           | 0.029                      | 10                                  | 0.290                            |    |              |
| <b>TOTAL</b>                        | <b>1,594</b>                | <b>158</b>                                         | <b>168</b>     | <b>158</b>     | <b>230</b>     | <b>215</b>     | <b>149</b>     | <b>117</b>     | <b>72</b>      | <b>60</b>      | <b>90</b>      | <b>64</b>      | <b>25</b>      | <b>18</b>      | <b>12</b>      | <b>58</b> | \$                         | <b>0.066</b>                        | <b>9<math>\frac{3}{8}</math></b> | \$ | <b>0.634</b> |

TABLE 37

AVERAGE WAGE RATES AND NUMBER OF HOURS WORKED PER DAY IN DIFFERENT  
OCCUPATIONS IN THE BLEACHING AND DYEING INDUSTRY  
MALE WORKERS

| OCCUPATION   | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |                |                |                |                |                |                |                |                |                |                |                |                |                |                | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |
|--------------|-----------------------------|----------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------------------|-------------------------------------|---------------------------|
|              |                             | \$ —<br>.0249                                      | .025-<br>.0349 | .035-<br>.0449 | .045-<br>.0549 | .055-<br>.0649 | .065-<br>.0749 | .075-<br>.0849 | .085-<br>.0949 | .095-<br>.1049 | .105-<br>.1149 | .115-<br>.1249 | .125-<br>.1349 | .135-<br>.1449 | .145-<br>.1549 | .155-<br>.1649 |                            |                                     |                           |
| Rolling      | T.W. 295                    |                                                    |                | 21             | 43             | 42             | 78             | 89             | 15             | 7              |                |                |                |                |                |                | \$ 0.068                   | 8 $\frac{4}{5}$                     | \$ 0.598                  |
| Dyeing       | " 835                       | 2                                                  | 162            | 233            | 168            | 81             | 61             | 109            | 10             | 3              | 3              |                |                | 3              |                |                | 0.051                      | 7 $\frac{3}{5}$                     | 0.367                     |
| Twisting     | " 204                       |                                                    |                |                | 22             | 11             | 15             | 153            | 1              | 1              | 1              |                |                |                |                |                | 0.075                      | 8 $\frac{3}{5}$                     | 0.645                     |
| Finishing    | " 109                       | 1                                                  | 3              | 6              | 7              | 17             | 11             | 31             | 25             | 3              | 1              |                |                |                | 2              | 2              | 0.076                      | 8 $\frac{3}{5}$                     | 0.667                     |
| <b>TOTAL</b> | <b>1,443</b>                | <b>3</b>                                           | <b>165</b>     | <b>260</b>     | <b>240</b>     | <b>151</b>     | <b>165</b>     | <b>382</b>     | <b>51</b>      | <b>14</b>      | <b>5</b>       |                |                | <b>3</b>       | <b>2</b>       | <b>2</b>       | \$ 0.060                   | 7 $\frac{4}{5}$                     | \$ 0.468                  |

AVERAGE WAGE RATES AND HOURS OF LABOR



TABLE 39

AVERAGE WAGE RATES AND NUMBER OF HOURS WORKED PER DAY  
IN DIFFERENT OCCUPATIONS IN THE FLOUR INDUSTRY  
MALE WORKERS

| OCCUPATION                  | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |            |            |            |            |            |            |            |            |            |            |            |            |            |          | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |
|-----------------------------|-----------------------------|----------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------|----------------------------|-------------------------------------|---------------------------|
|                             |                             | \$.005-.0149                                       | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 | .145-    |                            |                                     |                           |
| Wheat filling } T.W. 159    |                             |                                                    |            | 75         | 4          | 60         | 20         |            |            |            |            |            |            |            |            |          | \$ 0.042                   | 11                                  | \$ 0.462                  |
| Milling } „ 427             |                             |                                                    | 2          | 22         | 37         | 126        | 122        | 38         | 35         | 18         | 7          | 3          |            |            |            |          | 0.062                      | 11                                  | 0.682                     |
| Baling } „ 369              |                             |                                                    |            | 40         | 50         | 268        | 7          | 3          |            | 1          |            |            |            | 5          | 6          | 6        | 0.047                      | 11                                  | 0.517                     |
| Flour filling } „ 180       |                             |                                                    |            | 36         | 83         | 55         | 6          |            |            |            |            |            |            |            |            |          | 0.042                      | 11                                  | 0.462                     |
| Mechanics and smiths } „ 48 |                             |                                                    |            |            | 3          | 5          | 4          | 8          | 9          | 6          | 4          |            | 4          |            | 2          | 3        | 0.084                      | 11                                  | 0.924                     |
| Repairers } „ 34            |                             |                                                    |            |            |            | 1          | 5          | 22         | 5          |            | 1          |            |            |            |            |          | 0.070                      | 11                                  | 0.770                     |
| Coolies } „ 304             |                             |                                                    |            | 87         | 53         | 143        | 11         | 7          | 2          | 1          |            |            |            |            |            |          | 0.044                      | 11                                  | 0.484                     |
| <b>TOTAL</b>                | <b>1,521</b>                |                                                    | <b>2</b>   | <b>260</b> | <b>230</b> | <b>658</b> | <b>175</b> | <b>78</b>  | <b>51</b>  | <b>26</b>  | <b>12</b>  | <b>3</b>   | <b>4</b>   | <b>5</b>   | <b>8</b>   | <b>9</b> | <b>\$ 0.051</b>            | <b>11</b>                           | <b>\$ 0.561</b>           |

AVERAGE WAGE RATES AND HOURS OF LABOR

TABLE 40  
 AVERAGE WAGE RATES AND NUMBER OF HOURS WORKED PER DAY  
 IN DIFFERENT OCCUPATIONS IN THE OILS AND THEIR BY-PRODUCTS INDUSTRY  
 MALE WORKERS

| OCCUPATION         | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |            |            |            |            |            |            |            |            |            |            |            |            |            | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |          |
|--------------------|-----------------------------|----------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------------------------|-------------------------------------|---------------------------|----------|
|                    |                             | \$.005-.0149                                       | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 |                            |                                     |                           | .145-    |
| Oil pressing }     | T.W. 552                    |                                                    | 26         | 18         | 77         | 186        | 103        | 6          | 7          | 129        |            |            |            |            |            |                            | \$ 0.058                            | 9 $\frac{7}{10}$          | \$ 0.563 |
|                    | P.W. 498                    |                                                    |            |            |            |            |            |            |            | 498        |            |            |            |            |            |                            | 0.090                               | 6                         | 0.540    |
| Refining Mechanics | T.W. 66                     |                                                    |            | 7          |            | 11         | 46         | 2          |            |            |            |            |            |            |            |                            | 0.055                               | 11                        | 0.605    |
|                    | T.W. 142                    |                                                    |            | 4          |            | 52         | 19         | 8          | 24         | 16         |            | 13         | 1          |            |            |                            | 0.071                               | 10 $\frac{3}{8}$          | 0.758    |
| Repairers          | T.W. 49                     |                                                    |            |            | 26         | 3          | 5          | 1          | 7          | 5          |            |            |            |            |            |                            | 0.058                               | 11 $\frac{1}{2}$          | 0.650    |
|                    | T.W. 114                    |                                                    | 15         | 2          | 54         | 38         | 4          |            |            |            | 1          |            |            | 2          |            |                            | 0.042                               | 11                        | 0.462    |
| Coolies            |                             |                                                    |            |            |            |            |            |            |            |            |            |            |            |            |            |                            |                                     |                           |          |
| TOTAL              | 1,421                       |                                                    | 41         | 31         | 157        | 290        | 177        | 17         | 38         | 648        |            | 14         | 1          | 2          |            | 5                          | \$ 0.069                            | 8 $\frac{7}{10}$          | \$ 0.600 |

TABLE 41

AVERAGE WAGE RATES AND NUMBER OF HOURS WORKED PER DAY IN DIFFERENT OCCUPATIONS IN THE EGG AND EGG PRODUCTS INDUSTRY MALE WORKERS

| OCCUPATION               | No. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |            |            |            |            |            |            |            |            |            |            |            |            |            | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |                  |          |
|--------------------------|-----------------------------|----------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------------------------|-------------------------------------|---------------------------|------------------|----------|
|                          |                             | \$ .005-.0149                                      | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 |                            |                                     |                           | .145-            |          |
| Egg receiving            | T.W. 61                     |                                                    |            |            |            |            | 39         | 15         | 5          |            |            |            |            |            | 2          |                            |                                     | \$ 0.066                  | 9                | \$ 0.594 |
| Candling                 | " 48                        |                                                    |            |            |            | 18         | 11         | 6          | 9          | 2          | 1          |            |            |            |            | 1                          |                                     | 0.065                     | 9                | 0.585    |
| Egg breaking             | " 27                        |                                                    |            |            |            |            |            | 19         | 6          |            |            |            |            |            | 2          |                            |                                     | 0.074                     | 9                | 0.666    |
| Canning and cold storing | " 116                       |                                                    |            |            |            |            | 2          | 39         | 51         | 20         | 2          | 1          |            |            |            |                            | 1                                   | 0.069                     | 9                | 0.621    |
| Albomen drying           | " 10                        |                                                    |            |            | 10         |            |            |            |            |            |            |            |            |            |            |                            |                                     | 0.040                     | 9                | 0.036    |
| Packing                  | " 23                        |                                                    |            |            |            |            |            | 15         | 8          |            |            |            |            |            |            |                            |                                     | 0.063                     | 9                | 0.567    |
| Smiths and coolies       | " 56                        |                                                    |            |            | 7          | 14         | 17         | 2          | 2          | 1          | 9          | 1          |            |            |            | 1                          | 2                                   | 0.068                     | 10 $\frac{1}{2}$ | 0.734    |
| TOTAL                    | 341                         |                                                    |            |            | 17         | 34         | 121        | 101        | 42         | 5          | 13         | 3          |            |            | 2          |                            | 3                                   | \$ 0.067                  | 9 $\frac{1}{10}$ | \$ 0.623 |

AVERAGE WAGE RATES AND HOURS OF LABOR

FEMALE WORKERS

| OCCUPATION                             | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |                |                |                |                |                |                |                |                |                |                |                |                |                | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |            |       |
|----------------------------------------|-----------------------------|----------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------------------|-------------------------------------|---------------------------|------------|-------|
|                                        |                             | \$ .005-<br>.0149                                  | .015-<br>.0249 | .025-<br>.0349 | .035-<br>.0449 | .045-<br>.0549 | .055-<br>.0649 | .065-<br>.0749 | .075-<br>.0849 | .085-<br>.0949 | .095-<br>.1049 | .105-<br>.1149 | .115-<br>.1249 | .125-<br>.1349 | .135-<br>.1449 |                            |                                     |                           | .145-<br>— |       |
| Candling<br>Egg<br>breaking<br>Packing | T.W. 214                    |                                                    |                |                | 28             | 147            | 36             | 1              |                |                |                |                |                |                |                |                            | \$ 0.051                            | 9                         | \$ 0.459   |       |
|                                        | " 52                        |                                                    |                |                | 68             | 337            | 101            | 19             | 1              |                |                |                |                |                |                |                            |                                     | 0.051                     | 9          | 0.459 |
|                                        | " 24                        |                                                    |                |                |                | 24             |                |                |                |                |                |                |                |                |                |                            |                                     | 0.050                     | 9          | 0.450 |
| TOTAL                                  | 764                         |                                                    |                |                | 96             | 508            | 137            | 20             | 1              |                |                |                |                |                |                |                            | \$ 0.051                            | 9                         | \$ 0.459   |       |

WAGES AND HOURS OF LABOR



TABLE 42  
 AVERAGE WAGE RATES AND NUMBER OF HOURS WORKED PER DAY IN DIFFERENT  
 OCCUPATIONS OF THE VARIOUS DEPARTMENTS IN THE TOBACCO INDUSTRY  
 MALE WORKERS

| DEPARTMENT AND OCCUPATION  | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |                |                |                |                |                |                |                |                |                |                |                |                |                | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY         |                 |
|----------------------------|-----------------------------|----------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------------------|-------------------------------------|-----------------------------------|-----------------|
|                            |                             | \$ .005-<br>.0149                                  | .015-<br>.0249 | .025-<br>.0349 | .035-<br>.0449 | .045-<br>.0549 | .055-<br>.0649 | .065-<br>.0749 | .075-<br>.0849 | .085-<br>.0949 | .095-<br>.1049 | .105-<br>.1149 | .115-<br>.1249 | .125-<br>.1349 | .135-<br>.1449 |                            |                                     |                                   | .145-<br>—      |
| <i>Leaf Dept.</i>          |                             |                                                    |                |                |                |                |                |                |                |                |                |                |                |                |                |                            | \$                                  |                                   | \$              |
| Blending                   | T.W. 86                     |                                                    |                | 1              | 1              | 6              | 23             | 15             | 26             | 11             | 3              |                |                |                |                |                            | 0.072                               | 10                                | 0.720           |
| Stemming                   | " 162                       |                                                    |                |                | 15             | 6              | 39             | 37             | 39             | 6              | 2              | 1              | 1              | 3              | 9              | 4                          | 0.075                               | 10                                | 0.750           |
| Cutting                    | " 84                        |                                                    |                |                |                |                | 15             | 21             | 23             | 22             | 3              |                |                |                |                |                            | 0.077                               | 10                                | 0.770           |
| <i>Manufacturing Dept.</i> |                             |                                                    |                |                |                |                |                |                |                |                |                |                |                |                |                |                            |                                     |                                   |                 |
| Rolling                    | " 611                       |                                                    |                | 19             | 28             | 19             | 28             | 136            | 78             | 59             | 69             | 94             | 36             | 20             | 11             | 14                         | 0.087                               | 10 $\frac{3}{4}$                  | 0.922           |
| Drying                     | " 55                        |                                                    |                |                |                | 2              | 27             | 23             | 3              |                |                |                |                |                |                |                            | 0.065                               | 10 $\frac{3}{4}$                  | 0.676           |
| Sorting                    | " 49                        |                                                    |                |                |                | 25             | 21             | 2              | 1              |                |                |                |                |                |                |                            | 0.056                               | 11                                | 0.616           |
| <i>Packing Dept.</i>       |                             |                                                    |                |                |                |                |                |                |                |                |                |                |                |                |                |                            |                                     |                                   |                 |
| Wrapping                   | " 23                        |                                                    |                |                |                |                |                | 2              | 1              | 1              | 2              | 10             | 6              | 1              |                |                            | 0.097                               | 8 $\frac{1}{4}$                   | 0.800           |
| Tinfilling                 | " 15                        |                                                    |                |                | 9              | 2              |                | 1              | 3              |                |                |                |                |                |                |                            | 0.051                               | 10                                | 0.510           |
| Casing                     | " 96                        |                                                    |                |                |                | 3              | 15             | 33             | 34             | 9              | 2              |                |                |                |                |                            | 0.074                               | 10 $\frac{1}{2}$                  | 0.755           |
| <i>Mechanical Dept.</i>    |                             |                                                    |                |                |                |                |                |                |                |                |                |                |                |                |                |                            |                                     |                                   |                 |
| Mechanics                  | " 11                        |                                                    |                |                |                |                |                | 4              | 1              | 2              | 3              | 1              |                |                |                |                            | 0.076                               | 10 $\frac{1}{10}$                 | 0.768           |
| Repairers                  | " 67                        |                                                    |                | 1              | 2              | 1              | 2              | 39             | 8              | 1              | 2              |                | 4              |                |                |                            | 0.081                               | 10 $\frac{3}{8}$                  | 0.859           |
| Coolies                    | " 97                        |                                                    |                |                | 1              | 21             | 21             | 17             | 35             |                | 1              | 1              |                |                |                |                            | 0.068                               | 10 $\frac{3}{8}$                  | 0.707           |
| <b>TOTAL</b>               | <b>1,356</b>                |                                                    |                | <b>21</b>      | <b>56</b>      | <b>85</b>      | <b>197</b>     | <b>326</b>     | <b>253</b>     | <b>113</b>     | <b>93</b>      | <b>102</b>     | <b>42</b>      | <b>23</b>      | <b>23</b>      | <b>22</b>                  | <b>\$ 0.079</b>                     | <b>10<math>\frac{3}{8}</math></b> | <b>\$ 0.822</b> |

AVERAGE WAGE RATES AND HOURS OF LABOR

## FEMALE WORKERS

| DEPARTMENT AND OCCUPATION      | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |            |            |            |            |            |            |            |            |            |            |            |            |            | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |                   |          |
|--------------------------------|-----------------------------|----------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------------------------|-------------------------------------|---------------------------|-------------------|----------|
|                                |                             | \$ .005-.0149                                      | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 |                            |                                     |                           | .145-             |          |
| Leaf Dept.<br>Stemming         | T.W. 200                    |                                                    |            | 24         | 20         | 18         | 8          | 71         | 56         | 3          |            |            |            |            |            |                            |                                     | \$ 0.063                  | 8 $\frac{1}{2}$   | \$ 0.551 |
|                                | P.W. 355                    |                                                    |            |            |            | 5          | 7          | 36         | 13         | 67         | 9          | 193        | 1          | 22         |            |                            | 2                                   | 0.100                     | 7 $\frac{2}{5}$   | 0.740    |
| Manufacturing Dept.<br>Rolling | T.W. 92                     |                                                    | 1          | 3          | 4          | 13         | 22         | 15         | 10         | 5          | 7          | 3          | 1          | 2          |            |                            | 6                                   | 0.074                     | 10 $\frac{1}{10}$ | 0.747    |
|                                | Drying                      | T.W. 189                                           |            |            | 4          | 54         | 118        | 13         |            |            |            |            |            |            |            |                            |                                     | 0.057                     | 10                | 0.570    |
|                                | Sorting                     | T.W. 33                                            |            |            | 33         |            |            |            |            |            |            |            |            |            |            |                            |                                     | 0.040                     | 10                | 0.400    |
| Packing Dept.<br>Wrapping      | T.W. 16                     |                                                    |            | 12         | 2          | 1          | 1          |            |            |            |            |            |            |            |            |                            |                                     | 0.034                     | 10                | 0.340    |
|                                | P.W. 3,198                  | 86                                                 | 389        | 329        | 259        | 348        | 134        | 462        | 54         | 576        | 193        | 46         | 22         | 140        | 60         | 100                        |                                     | 0.066                     | 8 $\frac{3}{10}$  | 0.548    |
| Tinfiling                      | T.W. 21                     |                                                    |            |            | 20         | 1          |            |            |            |            |            |            |            |            |            |                            |                                     | 0.040                     | 10                | 0.400    |
|                                | P.W. 93                     |                                                    |            |            |            |            |            |            |            |            |            | 22         | 71         |            |            |                            |                                     | 0.118                     | 9                 | 1.062    |
| Casing Card board box making   | T.W. 11                     | 1                                                  | 2          | 3          | 2          |            | 1          |            | 1          | 1          |            |            |            |            |            |                            |                                     | 0.041                     | 10                | 0.410    |
|                                | P.W. 189                    |                                                    |            |            | 5          | 1          |            | 29         | 10         | 82         | 5          | 19         | 6          | 6          | 20         | 3                          | 3                                   | 0.087                     | 5 $\frac{1}{2}$   | 0.479    |
| TOTAL                          | 4,401                       | 87                                                 | 392        | 377        | 347        | 441        | 320        | 607        | 216        | 657        | 228        | 270        | 101        | 184        | 63         | 111                        | \$                                  | 0.070                     | 8 $\frac{9}{10}$  | \$ 0.581 |

### CHILD WORKERS

| DEPARTMENT AND OCCUPATION          | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |            |            |            |            |            |            |            |            |            |            |            |            |            | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |          |
|------------------------------------|-----------------------------|----------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------------------------|-------------------------------------|---------------------------|----------|
|                                    |                             | \$.005-.0149                                       | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 |                            |                                     |                           | .145-    |
| <i>Leaf Dept. Stemming</i>         | T.W. 21                     |                                                    |            | 6          | 3          | 10         | 2          |            |            |            |            |            |            |            |            |                            | \$ 0.044                            | 10                        | \$ 0.440 |
| <i>Manufacturing Dept. Rolling</i> | " 76                        |                                                    |            | 15         | 38         | 23         |            |            |            |            |            |            |            |            |            |                            | 0.041                               | 10 $\frac{1}{10}$         | 0.414    |
| <i>Dept. Packing</i>               | " 16                        |                                                    |            |            | 12         | 4          |            |            |            |            |            |            |            |            |            |                            | 0.043                               | 9                         | 0.387    |
| <b>TOTAL</b>                       | 113                         |                                                    |            | 21         | 53         | 37         | 2          |            |            |            |            |            |            |            |            |                            | \$ 0.042                            | 9 $\frac{8}{10}$          | \$ 0.416 |

AVERAGE WAGE RATES AND HOURS OF LABOR



TABLE 43

AVERAGE WAGE RATES AND NUMBER OF HOURS WORKED PER DAY IN DIFFERENT OCCUPATIONS  
OF THE VARIOUS DEPARTMENTS IN THE PAPER MAKING INDUSTRY  
MALE WORKERS

(Continued)

| DEPARTMENT AND OCCUPATION | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |            |            |            |            |            |            |            |            |            |            |            |            |            | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY       |          |
|---------------------------|-----------------------------|----------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------------------------|-------------------------------------|---------------------------------|----------|
|                           |                             | \$ .005-.0149                                      | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 |                            |                                     |                                 | .145—    |
| Repairers                 | T.W. 92                     |                                                    | 1          | 3          | 7          | 8          | 9          | 10         | 18         | 15         | 7          | 5          | 3          | 4          | 2          |                            | \$ 0.079                            | 10 <sup>3</sup> / <sub>11</sub> | \$ 0.837 |
| Coolies                   | " 48                        |                                                    |            |            | 26         | 19         | 2          |            | 1          |            |            |            |            |            |            |                            | 0.046                               | 11                              | 0.506    |
| TOTAL                     | 792                         |                                                    | 5          | 27         | 107        | 250        | 189        | 83         | 46         | 33         | 13         | 12         | 13         | 10         | 3          | 1                          | \$ 0.060                            | 11                              | \$ 0.660 |

## FEMALE WORKERS

| DEPARTMENT AND OCCUPATION          | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |            |            |            |            |            |            |            |            |            |            |            |            |            | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |          |
|------------------------------------|-----------------------------|----------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------------------------|-------------------------------------|---------------------------|----------|
|                                    |                             | \$ .005-.0149                                      | .015-.0249 | .025-.0349 | .035-.0449 | .045-.0549 | .055-.0649 | .065-.0749 | .075-.0849 | .085-.0949 | .095-.1049 | .105-.1149 | .115-.1249 | .125-.1349 | .135-.1449 |                            |                                     |                           | .145-    |
| <i>Raw Material Dept.</i>          | T.W. 238                    |                                                    |            | 196        | 42         |            |            |            |            |            |            |            |            |            |            |                            | \$ 0.032                            | 11                        | \$ 0.352 |
| <i>Sorting Manufacturing Dept.</i> |                             |                                                    |            |            |            |            |            |            |            |            |            |            |            |            |            |                            |                                     |                           |          |
| <i>Paper receiving</i>             | " 32                        |                                                    |            | 27         | 1          | 4          |            |            |            |            |            |            |            |            |            |                            | 0.033                               | 11                        | 0.363    |
| TOTAL                              | 270                         |                                                    |            | 223        | 43         | 4          |            |            |            |            |            |            |            |            |            |                            | \$ 0.032                            | 11                        | \$ 0.352 |

TABLE 44

AVERAGE WAGE RATES AND NUMBER OF HOURS WORKED PER DAY IN DIFFERENT OCCUPATIONS OF THE VARIOUS DEPARTMENTS IN THE PRINTING INDUSTRY MALE WORKERS

| DEPARTMENT AND OCCUPATION                          | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |           |           |           |           |           |           |           |           |           |           |           |           |           |        | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |          |
|----------------------------------------------------|-----------------------------|----------------------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------|----------------------------|-------------------------------------|---------------------------|----------|
|                                                    |                             | \$ — .049                                          | .05- .069 | .07- .089 | .09- .109 | .11- .129 | .13- .149 | .15- .169 | .17- .189 | .19- .209 | .21- .229 | .23- .249 | .25- .269 | .27- .289 | .29- .309 | .31- — |                            |                                     |                           |          |
| <i>Letter Press Printing Dept.</i><br>Type-casting | T.W. 59                     | 4                                                  | 1         | 5         | 8         | 10        | 6         | 7         | 10        | 8         |           |           |           |           |           |        |                            | \$ 0.135                            | 8½                        | \$ 1.125 |
|                                                    | P.W. 40                     | 3                                                  | 3         | 7         | 9         | 5         | 5         | 2         |           | 1         |           | 1         | 2         |           |           |        | 2                          | 0.125                               | 8                         | 1.000    |
| Type-composing                                     | T.W. 109                    | 4                                                  | 6         | 9         | 18        | 28        | 16        | 13        | 6         | 4         | 2         | 1         | 2         |           |           |        |                            | 0.127                               | 9                         | 1.143    |
|                                                    | P.W. 479                    | 51                                                 | 49        | 59        | 26        | 27        | 26        | 22        | 26        | 42        | 36        | 37        | 27        | 11        | 16        | 24     |                            | 0.157                               | 8½                        | 1.335    |
| Platemaking                                        | T.W. 30                     |                                                    |           | 1         | 2         | 2         | 6         | 9         | 4         | 3         | 1         | 1         |           |           |           |        |                            | 0.162                               | 9½                        | 1.490    |
|                                                    | P.W. 46                     |                                                    |           | 3         | 2         | 6         | 3         | 2         | 1         | 1         | 9         | 1         | 5         |           |           |        |                            | 0.213                               | 8½                        | 1.775    |
| Printing                                           | T.W. 254                    | 16                                                 | 14        | 22        | 47        | 48        | 29        | 32        | 17        | 15        | 12        | 1         | 1         | 3         | 3         | 7      |                            | 0.126                               | 8½                        | 1.071    |
|                                                    | P.W. 123                    |                                                    |           | 12        | 25        | 11        | 11        | 11        | 7         | 11        | 1         | 11        | 9         | 2         | 4         | 8      |                            | 0.171                               | 10½                       | 1.767    |
| Bookbinding                                        | T.W. 32                     |                                                    |           |           | 7         | 6         | 6         | 8         | 3         | 1         |           | 1         |           |           |           |        |                            | 0.141                               | 8                         | 1.128    |
|                                                    | P.W. 72                     |                                                    |           |           | 3         | 7         | 14        | 3         | 3         | 8         | 10        | 8         | 12        | 3         |           |        | 1                          | 0.196                               | 8                         | 1.568    |

AVERAGE WAGE RATES AND HOURS OF LABOR

TABLE 44

AVERAGE WAGE RATES AND NUMBER OF HOURS WORKED PER DAY IN DIFFERENT  
OCCUPATIONS OF THE VARIOUS DEPARTMENTS IN THE PRINTING INDUSTRY  
MALE WORKERS

(Continued)

| DEPARTMENT AND OCCUPATION            | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |           |           |           |           |           |           |           |           |           |           |           |           |           | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |        |
|--------------------------------------|-----------------------------|----------------------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------------------|-------------------------------------|---------------------------|--------|
|                                      |                             | \$ — .049                                          | .05- .069 | .07- .089 | .09- .109 | .11- .129 | .13- .149 | .15- .169 | .17- .189 | .19- .209 | .21- .229 | .23- .249 | .25- .269 | .27- .289 | .29- .309 |                            |                                     |                           | .31- — |
| <i>Lithographic Printing Dept.</i>   |                             |                                                    |           |           |           |           |           |           |           |           |           |           |           |           |           |                            |                                     |                           |        |
| Drawing and engraving } T.W. 201     | 8                           | 2                                                  | 2         | 11        | 46        | 36        | 26        | 19        | 12        | 13        | 4         | 4         | 6         | 8         | 4         | \$ 0.161                   | 8                                   | \$ 1.288                  |        |
| Plate-making } T.W. 91               | 5                           | 4                                                  | 11        | 14        | 7         | 14        |           | 3         | 5         | 10        |           | 4         | 4         | 6         | 4         | 0.159                      | 9½                                  | 1.511                     |        |
| Printing } T.W. 136                  | 16                          | 13                                                 | 1         | 42        | 26        | 12        | 12        | 3         | 6         | 2         |           | 1         |           |           | 2         | 0.114                      | 9                                   | 1.026                     |        |
| Finishing and cutting } T.W. 16      |                             | 1                                                  | 1         |           | 3         | 2         | 8         | 1         |           |           |           |           |           |           |           | 0.140                      | 8                                   | 1.120                     |        |
| P.W. 7                               |                             |                                                    |           |           |           |           | 1         | 2         | 3         | 1         |           |           |           |           |           | 0.191                      | 8                                   | 1.528                     |        |
| <i>Art and Photo-engraving Dept.</i> |                             |                                                    |           |           |           |           |           |           |           |           |           |           |           |           |           |                            |                                     |                           |        |
| Photo-engraving } T.W. 147           | 4                           | 7                                                  | 8         | 30        | 32        | 20        | 16        | 9         | 11        | 5         | 1         | 1         | 1         | 1         | 1         | 0.134                      | 8½                                  | 1.116                     |        |
| Copper-plate engraving } T.W. 75     |                             | 14                                                 | 11        | 12        | 11        | 13        | 9         | 1         | 1         | 1         |           |           |           |           | 2         | 0.117                      | 8¼                                  | 0.965                     |        |



TABLE 44

AVERAGE WAGE RATES AND NUMBER OF HOURS WORKED PER DAY IN DIFFERENT  
OCCUPATIONS OF THE VARIOUS DEPARTMENTS IN THE PRINTING INDUSTRY  
MALE WORKERS

(Continued)

| DEPARTMENT AND OCCUPATION                                | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |           |           |           |           |           |           |           |           |           |           |           |           |           |        | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |
|----------------------------------------------------------|-----------------------------|----------------------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------|----------------------------|-------------------------------------|---------------------------|
|                                                          |                             | \$ — .049                                          | .05- .069 | .07- .089 | .09- .109 | .11- .129 | .13- .149 | .15- .169 | .17- .189 | .19- .209 | .21- .229 | .23- .249 | .25- .269 | .27- .289 | .29- .309 | .31- — |                            |                                     |                           |
| Miscellaneous Dept.<br>Mechanics and smiths }<br>Coolies | T.W. 69                     |                                                    | 1         |           | 8         | 28        | 16        | 16        |           |           |           |           |           |           |           |        | \$ 0.131                   | 8                                   | \$ 1.048                  |
|                                                          | P.W. 12                     |                                                    |           |           |           | 2         | 2         | 2         | 3         | 3         |           |           |           |           |           |        | 0.165                      | 8                                   | 1.320                     |
|                                                          | T.W. 60                     | 1                                                  | 6         | 7         | 4         | 19        | 19        | 3         |           | 1         |           |           |           |           |           |        | 0.116                      | 8½                                  | 0.986                     |
| TOTAL                                                    | 2,058                       | 112                                                | 121       | 159       | 268       | 324       | 256       | 202       | 118       | 136       | 103       | 67        | 68        | 31        | 38        | 55     | \$ 0.146                   | 8¾                                  | \$ 1.226                  |

AVERAGE WAGE RATES AND HOURS OF LABOR



## CHILD WORKERS

| DEPARTMENT AND OCCUPATION                                                                                  | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORLING TO WAGE CLASS INTERVAL |           |           |           |           |           |           |           |           |           |           |           |           |           | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |                |
|------------------------------------------------------------------------------------------------------------|-----------------------------|----------------------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------------------|-------------------------------------|---------------------------|----------------|
|                                                                                                            |                             | \$ — .049                                          | .05- .069 | .07- .089 | .09- .109 | .11- .129 | .13- .149 | .15- .169 | .17- .189 | .19- .209 | .21- .229 | .23- .249 | .25- .269 | .27- .289 | .29- .309 |                            |                                     |                           | .31 —          |
| <i>Letter Press Printing Dept.</i><br>Type composing }<br>Printing                                         | T.W. 10                     | 10                                                 |           |           |           |           |           |           |           |           |           |           |           |           |           |                            | \$ 0.040                            | 11½                       | \$ 0.460       |
|                                                                                                            | T.W. 10<br>P.W. 16          | 9<br>16                                            | 1         |           |           |           |           |           |           |           |           |           |           |           |           |                            | 0.042<br>0.040                      | 13½<br>11½                | 0.567<br>0.460 |
| <i>Lithographic Printing Dept.</i><br>Drawing and engraving }<br>Plate-making }<br>Lithographic printing } | T.W. 4                      | 4                                                  |           |           |           |           |           |           |           |           |           |           |           |           |           |                            | 0.040                               | 12¾                       | 0.510          |
|                                                                                                            | T.W. 20                     | 18                                                 | 2         |           |           |           |           |           |           |           |           |           |           |           |           |                            | 0.042                               | 12½                       | 0.518          |
|                                                                                                            | T.W. 40                     | 39                                                 | 1         |           |           |           |           |           |           |           |           |           |           |           |           |                            | 0.041                               | 10½                       | 0.420          |
| <i>Art and Photo Engraving Dept.</i><br>Photo-engraving }                                                  | T.W. 4                      | 4                                                  |           |           |           |           |           |           |           |           |           |           |           |           |           |                            | 0.040                               | 8½                        | 0.340          |

AVERAGE WAGE RATES AND HOURS OF LABOR 129

CHILD WORKERS

(Continued)

| DEPARTMENT AND OCCUPATION                               | NO. OF WORKERS INVESTIGATED | NUMBER OF WORKERS ACCORDING TO WAGE CLASS INTERVAL |           |           |           |           |           |           |           |           |           |           |           |           |           | AVERAGE WAGE RATE PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATE PER DAY |          |
|---------------------------------------------------------|-----------------------------|----------------------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------------------|-------------------------------------|---------------------------|----------|
|                                                         |                             | \$ — .049                                          | .05- .069 | .07- .089 | .09- .109 | .11- .129 | .13- .149 | .15- .169 | .17- .189 | .19- .209 | .21- .229 | .23- .249 | .25- .269 | .27- .289 | .29- .309 |                            |                                     |                           | .31 —    |
| Photo-<br>engraving }<br>Copper<br>plate<br>engraving } | P.W. 15                     | 15                                                 |           |           |           |           |           |           |           |           |           |           |           |           |           |                            | \$ 0.040                            | 11½                       | \$ 0.460 |
|                                                         | T.W. 6                      | 5                                                  | 1         |           |           |           |           |           |           |           |           |           |           |           |           |                            | 0.043                               | 8½                        | 0.366    |
| TOTAL                                                   | 125                         | 120                                                | 5         |           |           |           |           |           |           |           |           |           |           |           |           |                            | \$ 0.041                            | 10½                       | \$ 0.418 |

**Discussion  
on the sum-  
mary table  
of wage rates  
and hours of  
labor**

The laborers in various industries in the summary table can be distributed according to the average hourly wage rates as follows:

- (1) Laborers whose average hourly rates ranging from 1 cent to 5 cents:—Child workers in glass industry; female workers in soap; female and child workers in match; female and child workers in enamel and silk reeling; male, female, and child workers in cotton spinning; female and child workers in cotton weaving; child workers in tobacco; female workers in paper; and child workers in printing.
- (2) From 5 cents to 10 cents:—Male workers in sawing, foundry, machinery, glass, soap, match, enamel, and silk reeling; female workers in silk weaving; male workers in cotton weaving; male and female workers in silk and cotton knitting; male workers in bleaching and dyeing, tanning, flour, and oil; male and female workers in egg and tobacco; and male workers in paper.
- (3) From 10 cents to 15 cents:—Male workers in ship building, and silk weaving; and male and female workers in printing.

**Reasons for  
variations in  
wage rates of  
different in-  
dustries**

The dispersion among the average wage rates of the laborers in different industries can be explained by the following reasons:

(1) The problem of skill—The problem of skill is threefold; the nature of work, the age and sex of the laborers, and the duration of service. (a) The difference in the nature of work can be illustrated by silk weaving and silk reeling industries. Greater degree of skill is required of laborers in the silk weaving industry than in the silk reeling industry. Silk weaving laborers are required to undergo a training period of six months, and are to receive half pay for the first year of work after the training is over. While in the silk reeling industry, a lesser degree of skill is required except in the reeling and finishing departments, where a certain extent of training and experience is necessary. Such difference in the degree of skill required accounts for the dispersion of the average wage rates in these two industries. (b) The physical and mental ability of laborers varies with the difference in sex age. Heavy and complex work are generally assigned to male workers, and female or child workers are mostly engaged in lighter and simpler jobs. In general, female or child workers receive lower pay than male workers and the difference is partly due to discrimination against female or child workers. They are paid less just because of their sex or age. (c) Higher pay is generally paid to laborers with longer period of service. A system of reward for laborers of long terms of service has

been effected in many establishments. The long duration of service is an indication of higher skill and better experience.

(2) The problem of business conditions — The difference in the business conditions of the various industries tends to affect the uniformity of the average wage rates in those industries. In the printing industry, wage rates are highest in the Commercial Press. Better internal organization, large number of skilled laborers under employment, better treatment, and particularly the prestige of being a leading concern in this city are the underlying factors behind its high wage level. Establishments in the cotton spinning industry are mostly of large scale and are well organized. The average wage rates in that industry are, however, very low. This is due mainly to the relatively low degree of skill required of the laborers in that industry. The same condition is true of the silk reeling industry.

The wage data as shown in the above tables are, however, only representative of a period of normal condition, in so far as the date of investigation is fixed at the 25th of September, which is a month of normal fluctuations. The abnormality of the movements of wages cannot be shown by the above data. The general trend of wage movements is better indicated in the statistics of monthly earnings.

**Wage rates  
in different  
occupations  
graded**

The analytical study of the foregoing tables is made with the various industries as units. Within these individual industries, the average wage rates in different occupations can be further graded. The male workers in the cotton spinning industry (average wage rate from 1 cent to 5 cents), those in the sawing industry (from 5 cents to 10 cents), and those in the shipbuilding industry (from 10 cents to 15 cents) may be taken to represent the three gradations of industries. Among the male workers in the cotton spinning industry, the average wage rate per hour is highest in piece workers of the waste cotton department with \$0.119. Then bundling workers of the baling department working on piece rates with \$0.071; smiths of the mechanical department, \$0.070; mechanics, \$0.063; then foremen of the roving department, \$0.053; and of the spinning department, \$0.050. In the sawing industry, the average wage rate is highest for mechanics with \$0.114. Sawers come next with \$0.065, and coolies last with \$0.063. In the shipbuilding industry, copper-smiths lead all other occupations with the average wage rate of \$0.136. Then follow fitters and pattern-makers with \$0.135, and turners with \$0.115. The lowest rate is that of new hands, which amounts to \$0.030 only. The difference in wage rates of different occupations are due to no other reasons than those mentioned in connection with the dispersion of wage rates among different industries. The problem of skill undoubtedly plays the chief rôle. The degree

of skill required of the laborers in a particular industry differs considerably from occupation to occupation.

Industries  
classified ac-  
cording to  
number of  
hours worked

The laborers in the various industries can be further classified into gradations according to the number of hours worked per day as follows:

- (1) Laborers work from 7 to 8 hours per day:—Male workers in bleaching and dyeing industry.
- (2) From 8 to 9 hours per day:—Male and child workers in glass; female and child workers in match; male workers in oil; female workers in tobacco; and male and female workers in printing.
- (3) From 9 to 10 hours per day:—Male workers in sawing, foundry, machinery, and shipbuilding; male and female workers in soap; male workers in match; male, female, and child workers in enamel; female workers in silk and cotton knitting; male workers in tanning; male and female workers in egg; and child workers in tobacco.
- (4) From 10 to 11 hours per day:—Male and female workers in silk weaving; male workers in silk and cotton knitting and tobacco; and child workers in printing.
- (5) From 11 to 12 hours per day:—Male, female, and child workers in silk reeling, cotton spinning, and cotton weaving; male workers in flour; and male and female workers in paper.

According to tables of the number of establishments and laborers in various industries in this city, cotton spinning, silk reeling, and cotton weaving industries show the greatest number of 110,882, 51,376, and 29,244 laborers respectively. The total number of laborers in the above three industries amount to 191,502, which constitute 67% of the total number of laborers in the 21 industries. All of these three industries fall within the group from 11 to 12 hours' work per day. On the other hand, only one industry, the bleaching and dyeing industry, work less than 8 hours per day.<sup>1</sup> The number of laborers in that industry amount to 2,914 only, which constitute 1.02% of the total number of laborers. The number of hours worked per day in the glass industry is exactly 8, but this applies to only 3, 043 laborers or 1.07% of the total number of laborers.

<sup>1</sup>The highest number of hours worked per day is from 11–12 hours. This applies only to those factories covered in the investigation. There are, however, workers in the handicraft workshops who do work longer than 12 hours in the course of a day.

The average hourly wage rates in the cotton spinning, silk reeling, and cotton weaving industries are all below 10 cents. In other words, 67% of the total number of laborers in the 21 industries in this city receive the low wage of less than 10 cents per hour. The average wage rates of male workers in the shipbuilding, male in silk weaving, and male and female in printing industries are all over 10 cents per hour. But the total number of laborers amounts to 18,642, which constitute only 6.5% of the total number of laborers in the 21 industries. The number of hours worked per day in printing, shipbuilding, and silk weaving industries are from 8 to 9, 9 to 10, and 10 to 11 hours respectively. Shorter working hours are therefore prevailing in these industries than in cotton spinning, silk reeling, and cotton weaving. Following is the summary table of the average hourly and daily wage rates and number of hours worked per day in different industries:



TABLE 45

SUMMARY TABLE OF THE AVERAGE HOURLY AND DAILY WAGE RATES AND NUMBER OF HOURS WORKED PER DAY IN DIFFERENT INDUSTRIES

| CLASSIFICATION OF INDUSTRIES       | TYPE OF WORKERS | NO. OF WORKERS INVESTIGATED | AVERAGE WAGE RATES PER HOUR | AVERAGE NO. OF HOURS WORKED PER DAY | AVERAGE WAGE RATES PER DAY |
|------------------------------------|-----------------|-----------------------------|-----------------------------|-------------------------------------|----------------------------|
| I. Wood Working                    |                 |                             |                             |                                     |                            |
| A. Sawing                          | Male            | 1,183                       | \$0.069                     | 9                                   | \$0.621                    |
| II. Metallurgy                     |                 |                             |                             |                                     |                            |
| A. Foundry                         | Male            | 540                         | 0.086                       | 9                                   | 0.774                      |
| III. Machinery, etc.               |                 |                             |                             |                                     |                            |
| A. Machinery                       | Male            | 2,958                       | 0.087                       | 9                                   | 0.783                      |
| IV. Construction of Boats, etc.    |                 |                             |                             |                                     |                            |
| A. Shipbuilding                    | Male            | 2,040                       | 0.113                       | 9                                   | 1.017                      |
| V. Manufacture of Bricks, etc.     |                 |                             |                             |                                     |                            |
| A. Glass-making                    | { Male          | 466                         | 0.084                       | 8                                   | 0.672                      |
|                                    | { Child         | 449                         | 0.040                       | 8                                   | 0.320                      |
| VI. Manufacture of Chemicals, etc. |                 |                             |                             |                                     |                            |
| A. Soap-making                     | { Male          | 568                         | 0.059                       | 9 $\frac{1}{2}$                     | 0.543                      |
|                                    | { Female        | 241                         | 0.035                       | 9 $\frac{1}{2}$                     | 0.322                      |
|                                    | { Male          | 559                         | 0.086                       | 9 $\frac{1}{2}$                     | 0.803                      |
| B. Match-making                    | { Female        | 818                         | 0.027                       | 8 $\frac{9}{10}$                    | 0.240                      |
|                                    | { Child         | 342                         | 0.025                       | 8 $\frac{1}{10}$                    | 0.203                      |
|                                    | { Male          | 1,007                       | 0.059                       | 9 $\frac{3}{8}$                     | 0.555                      |
| C. Enamelling                      | { Female        | 186                         | 0.047                       | 9                                   | 0.423                      |
|                                    | { Child         | 59                          | 0.036                       | 9                                   | 0.324                      |
| VII. Textiles                      |                 |                             |                             |                                     |                            |
| A. Silk Reeling                    | { Male          | 518                         | 0.061                       | 12                                  | 0.732                      |
|                                    | { Female        | 14,643                      | 0.049                       | 11                                  | 0.539                      |
|                                    | { Child         | 4,873                       | 0.030                       | 11                                  | 0.330                      |
| B. Cotton Spinning                 | { Male          | 7,558                       | 0.047                       | 11 $\frac{3}{8}$                    | 0.552                      |
|                                    | { Female        | 27,574                      | 0.038                       | 11 $\frac{1}{10}$                   | 0.452                      |
|                                    | { Child         | 1,161                       | 0.025                       | 12                                  | 0.300                      |
| C. Silk Weaving                    | { Male          | 1,002                       | 0.120                       | 10 $\frac{1}{2}$                    | 1.260                      |
|                                    | { Female        | 566                         | 0.086                       | 10 $\frac{3}{8}$                    | 0.894                      |
|                                    | { Male          | 2,558                       | 0.065                       | 11 $\frac{1}{10}$                   | 0.722                      |
| D. Cotton Weaving                  | { Female        | 7,128                       | 0.047                       | 11 $\frac{5}{8}$                    | 0.545                      |
|                                    | { Child         | 394                         | 0.031                       | 11 $\frac{1}{2}$                    | 0.357                      |
| E. Silk and Cotton Knitting        | { Male          | 572                         | 0.081                       | 10 $\frac{1}{10}$                   | 0.818                      |
|                                    | { Female        | 1,594                       | 0.066                       | 9 $\frac{3}{8}$                     | 0.634                      |
| F. Bleaching and Dyeing            | Male            | 1,443                       | 0.060                       | 7 $\frac{3}{8}$                     | 0.468                      |
| VIII. Manufacture of Leather, etc. |                 |                             |                             |                                     |                            |
| A. Tanning                         | Male            | 592                         | 0.069                       | 9                                   | 0.621                      |
| IX. Manufacture of Food, etc.      |                 |                             |                             |                                     |                            |
| A. Flour                           | Male            | 1,521                       | 0.051                       | 11                                  | 0.561                      |
| B. Oils and their By-products      | { Male          | 1,421                       | 0.069                       | 8 $\frac{7}{10}$                    | 0.600                      |
|                                    | { Male          | 341                         | 0.067                       | 9 $\frac{7}{10}$                    | 0.623                      |
| C. Egg and Egg-products            | { Female        | 764                         | 0.051                       | 9                                   | 0.459                      |
|                                    | { Male          | 1,356                       | 0.079                       | 10 $\frac{3}{8}$                    | 0.822                      |
| D. Tobacco                         | { Female        | 4,401                       | 0.070                       | 8 $\frac{3}{10}$                    | 0.581                      |
|                                    | { Child         | 113                         | 0.042                       | 9 $\frac{9}{10}$                    | 0.416                      |
| X. Paper and Printing              |                 |                             |                             |                                     |                            |
| A. Paper-making                    | { Male          | 792                         | 0.060                       | 11                                  | 0.660                      |
|                                    | { Female        | 270                         | 0.032                       | 11                                  | 0.352                      |
|                                    | { Male          | 2,058                       | 0.146                       | 8 $\frac{3}{8}$                     | 1.226                      |
| B. Printing                        | { Female        | 288                         | 0.102                       | 8 $\frac{1}{10}$                    | 0.826                      |
|                                    | { Child         | 125                         | 0.041                       | 10 $\frac{1}{8}$                    | 0.418                      |

Discussion  
on the sum-  
mary table of  
the distribu-  
tion of male,  
female, and  
child workers  
according to  
average  
hourly wage  
rates

The third table shows that the average hourly wage rates of male, female, and child workers in the various industries are \$0.073, \$0.044, and \$0.034 respectively. Assuming that eight hours' work per day is the regular hours of work, the average daily wage rates of male, female, and child workers are computed as \$0.584, \$0.352, and \$0.272 respectively. Again assuming 30 days' work per month, the average monthly wage rates of male, female, and child workers are \$17.52, \$10.56, and \$8.16 respectively. These figures do not necessarily correspond to the average actual earnings of the laborers. Where the average wage rates agree with the average earnings is just a matter of coincidence. The average wage rates, at present, as in the case of average earnings, are not converted to index numbers owing to the fact that the weights have not yet been determined.

Basing judgment upon the results of the present study, it is thought abrupt but quite apt to arrive at a general conclusion that the wages of the factory laborers in Greater Shanghai are very low and their hours of work long. It is, no doubt, dangerous to judge, ere the compilation of the index numbers of cost of living of laborers in Shanghai, whether the low wages the laborers receive are sufficient to maintain their living. However, if we compare the wage rates and hours of work of the laborers in this city with those in other countries, we cannot help but admit that factory laborers in Shanghai are doomed to low wages and long hours. The following tables show the distribution of male, female, and child workers according to the average hourly wage rates:

**TABLE 46**  
**SUMMARY TABLE SHOWING THE DISTRIBUTION OF MALE, FEMALE, AND CHILD WORKERS**  
**ACCORDING TO AVERAGE HOURLY WAGE RATES**

(A) MALE WORKERS

| (1) AV. HOURLY RATE | .02-.029 | .03-.039 | .04-.049   | .05-.059 | .06-.069 | .07-.079 | .08-.089 | .09-.099 | .10-.109 | .11-.119 | .12-.129 | .13-.139 | TOTAL        |
|---------------------|----------|----------|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------------|
| (2) NO. OF LABORERS |          |          | 7,558      | 3,096    | 8,848    | 1,356    | 5,095    |          |          | 2,040    | 1,002    | 2,058    | 31,053       |
| (1) X (2)           |          |          | \$ 340.110 | 170.280  | 575.120  | 101.700  | 433.075  |          |          | 234.600  | 125.250  | 277.830  | \$ 2,257.965 |

Average Hourly Rate of Male Workers—\$.073

(B) FEMALE WORKERS

| (1) AV. HOURLY RATE | .02-.029  | .03-.039 | .04-.049 | .05-.059 | .06-.069 | .07-.079 | .08-.089 | .09-.099 | .10-.109 | .11-.119 | .12-.129 | .13-.139 | TOTAL        |
|---------------------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------------|
| (2) NO. OF LABORERS | 818       | 28,085   | 21,957   | 764      | 1,594    | 4,401    | 566      |          | 288      |          |          |          | 58,473       |
| (1) X (2)           | \$ 20.450 | 982.975  | 988.065  | 42.020   | 103.610  | 330.075  | 48.110   |          | 30.240   |          |          |          | \$ 2,545.545 |

Average Hourly Rate of Female Workers—\$.044

(C) CHILD WORKERS

| (1) AV. HOURLY RATE | .02-.029  | .03-.039 | .04-.049 | .05-.059 | .06-.069 | .07-.079 | .08-.089 | .09-.099 | .10-.109 | .11-.119 | .12-.129 | .13-.139 | TOTAL      |
|---------------------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|
| (2) NO. OF LABORERS | 1,593     | 5,326    | 687      |          |          |          |          |          |          |          |          |          | 7,516      |
| (1) X (2)           | \$ 37.575 | 186.410  | 30.915   |          |          |          |          |          |          |          |          |          | \$ 254.900 |

Average Hourly Rate of Child Workers—\$.034

## PART 3

### Statistics of Monthly Earnings

#### CHAPTER I

##### INTRODUCTION

**Points in  
divergence  
with work  
of 1928**

The present study of the average monthly earnings of the factory laborers in Greater Shanghai in 1929 is a sequel to the work of the previous year. Explanations as to the collection of data and the method of compilation, together with an account of the work that has been done, have been made in sufficient details in "The Index Numbers of Earnings of the Factory Laborers in Greater Shanghai, 1928." No recounting of these details is therefore necessary here. But, outwardly at least, the work of this year exhibits two points that are in divergence with that of the previous year. First, a different classification of the industries has been adopted. In 1928, the industries are classified according to a system of grouping temporarily established by the Bureau. In view of facility in international comparison, however, we have decided to adopt the method of classification recommended by the International Labor Office in "The Classification of Industries and Occupations." The 30 industries investigated, which have formerly been classified with reference to the nature of work, the wage level, and the standard of skill into 5 groups, are now regrouped under 11 categories. What falls within a certain group according to the former classification may now appear under a different class. And any class in the present study may not comprise the same number of industries as in the previous study. But, as the figures are given separately for laborers within each industry, a change in the method of classification would produce no other effect than a rearrangement of the various industries.

**2. Longer  
period cover-  
ed**

In the second place, in 1928, average monthly earnings were computed only for a period of six months covering the latter half of the year, which are undoubtedly inadequate to be indicative of the general tendency of fluctuations from month to month in the year; while the present study covers the whole year and will therefore give a more complete idea of the variations. However, we cannot depend upon the result of one or two years' study as our criterion in tracing the long-time trend in the movements of

earnings. We have to suspend our judgment until our work will have covered a sufficiently long period of time.

**Peculiarities  
inherent in  
the move-  
ments of  
earnings**

Before we proceeded to analyze the data of the average earnings, a consideration is due to the peculiarities inherent in the movements of earnings as different from those of wage rates. Wage rates are the results of agreements between employers and employees. No changes can be effected without the consent of both parties. Therefore, the movements are in general slow and regular. Not infrequently, however, increases in wage rates form a part of the terms of settlement of strikes. But, such increases usually apply to particular groups of workers only, and would not have such a significant effect as to raise the general wage level to an appreciable extent, excepting of course when such increases occur in large scale establishments. On the other hand, the movements of earnings are extremely irregular and fluctuating. They are subject to the influences of various causes. Earnings tend to follow the track of seasonal changes. They are affected to no lesser degree by the distribution of reward and bonus. They vary with the number of hours or days worked. Those are not all. A later section will deal with those modifying factors in sufficient detail. What is even more perplexing is that any particular causal factor may not be confined to a particular month or months. Again, the course of variation in a particular month may be shaped by more causes than one. Thus, the monthly fluctuating movements are in themselves exceedingly irregular and haphazard.

## CHAPTER 2

### CAUSES OF FLUCTUATIONS

#### Three grades of earnings

In the table at the end of the chapter, in addition to the average monthly earnings, weighted arithmetic averages for the whole year are computed for different industries with no other object than to present a comprehensive idea as to how much the workers in different industries are earning each month on the average. These industries may be classified according to the amount of average earnings of the workers into three grades as follows:

(1) Industries in which the average earnings of laborers ranging from \$10 to \$15<sup>1</sup>:—Silk reeling, cotton spinning, and tobacco.

(2) From \$15 to \$25<sup>1</sup>:—Sawing, foundry, electrical machines and appliances, glass, cement and tiles, candle and soap, paint and varnish, match, enamel, toilet preparation, cotton weaving, silk and cotton knitting, wool weaving, bleaching and dyeing, tanning, flour, oils and their by-products, egg and egg products, cold drinks and refrigerating, and paper.

(3) From \$25 to \$40<sup>1</sup>:—Machinery, ship-building, electricity, water works, silk weaving, canned foods, and printing.

#### Difference in skill

The difference in earnings can be explained by the difference in the degree of skill required in various industries. Wages are necessarily higher in those industries where greater skill is required and special training is necessary. For example, a certain amount of skill and ability to read are required of workers in the printing industry. This naturally tends to elevate their wage level. Also, workers in the machinery industry are required to go through a given period of apprenticeship. Likewise their wage rates are quite high. Silk weavers have to undergo a period of apprenticeship for six months, and a trial period of one year receiving only half pay, before assuming normal work. Such elaborate qualifications naturally demand a higher remuneration. Similarly, the high wage level in the ship-building and electricity industries can be ascribed to no other causes than the greater amount of skill required of the workers. Turning to the industries of comparatively low earnings, the contrary is true. Workers in the silk reeling and cotton weaving industries need very little skill; a short period of practice will suffice to train a satisfactory laborer.

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<sup>1</sup>Only the principal type of workers in an industry is considered.

With the exception of a few occupations, skill is of minor importance in the match and tobacco industries. Again, the work of the female workers in these industries is irregular and their outputs vary in amount from time to time (female workers being the principal type of workers in the tobacco industry). This tends to drag their wage rates to a still lower level.

**Seasonal changes; months of normal and abnormal fluctuations**

In examining the movements of the monthly earnings of the various industries as a whole, we discover that there is a tendency for the general average earnings to fluctuate in sympathy with seasonal changes. They tend to rise or fall considerably in the months of January, February, July, August and December, which might be termed "the months of abnormal fluctuations"; and they assume a relatively smoother course in the months of April, May, September, and October, which might be given the name "the months of normal fluctuations." Such discrimination between normal and abnormal fluctuations is of course made in view of the general average earnings of various industries as a whole. A closer scrutiny shows that exceptions are inevitable. For instance, earnings in the toilet preparation industry rise to a peak in the normal month of April. An enumeration of the underlying factors behind such tendency of fluctuations will be taken up later.

**Fluctuations in individual industries**

When the fluctuations in earnings are considered separately for the individual industries, they seem to vary in degree of violence in different industries. Industries with marked fluctuations in workers' monthly earnings consist of ship-building, match, silk weaving, silk and cotton knitting, cold drinks and refrigerating, tobacco, etc. Industries with slight fluctuations consist of foundry, machinery, cement and tiles, electricity, water works, silk reeling, bleaching and dyeing, flour, oils and their by-products, etc.

**Movements in abnormal months analyzed**

Thus far we have clarified the general movements of the average monthly earnings. Before investigating into the causes underlying these fluctuations, we may now analyze further the movements of the earnings in the various industries during the abnormal months. Among the months of abnormal fluctuations, January and February exhibit the greatest degree of abnormality, December ranks second, and July and August come last. Laborers' earnings are highest in January in the following industries: machinery, electrical machines and appliances, cement and tiles, water works, paint and varnish, match, enamel, cotton spinning, paper, and also male workers in the tobacco industry; and comparatively high in the following industries: sawing, glass, silk reeling, bleaching and dyeing, flour, oils and their by-products. Laborers' earnings are lowest in February in the following 13 industries: sawing, machinery, electrical

machines and appliances, ship-building, match, silk reeling, silk weaving, cotton weaving, silk and cotton knitting, wool weaving, tanning, egg and egg products, and tobacco; and comparatively low in the following 6 industries: foundry, electricity, water works, candle and soap, oils and their by-products, and paper. Laborers' earnings are especially high in December in 5 industries, comprising electricity, canned goods, cold drinks and refrigerating, machinery (highest in January), and printing (highest in June); and comparatively high in candle and soap, and silk weaving industries. The months of July and August are not so markedly characterized with abnormal fluctuations as the above-mentioned months. But there is an apparent tendency for earnings in nearly all industries to fall off during these two months. The following sections treat in detail some of the important causes leading up to these fluctuating movements:

**Causes of  
fluctuations:  
(1) Reward  
and bonus**

There are two types of rewards, general rewards and special rewards. General rewards comprise various forms of rewards given every month. Special rewards are those given only at the beginning or end of the year or occasionally in certain particular seasons, such as the double pay at the end of the year, etc. Bonuses are similar in nature to special rewards. They are not necessarily distributed at the beginning or end of the year. Some establishments give all these forms of rewards and bonuses; general rewards are given monthly, special rewards at the beginning or end of the year, and bonuses distributed once or twice in the year in certain specified months. Some establishments give only one or two kinds of these rewards and bonuses. Some establishments do not have such system at all. Great diversity therefore exists in the practices of different establishments. However, these rewards and bonuses are granted with the view to give the laborers an incentive to work. General rewards given regularly have no significant effects upon the movements of the average monthly earnings of the laborers. Special rewards or bonuses paid in large sums, however, tend to intensify their fluctuations to a considerable extent. The following account of the bonuses and rewards given by various establishments will help to show how much these extra payments raised the average earnings of laborers in the months of January and December. In the month of January, reward and double pay for the end of the lunar year are given in the following establishments: Hwa Tung Engineering Plant in the machinery industry; Watson, Yih Chung, and Crison Crucible Manufacturing Co. in the industry of electrical machines and appliances; Shanghai Portland Cement Works in the cement and tiles industry; Chapei Electricity and Water Works Co. in the water works industry; Tsung Hwa and Kai Ling in the paint and varnish industry (with half a month's night work); Chung Hwa, Lee Ming, and Yung



Chong (reward amounting to one month's pay given to workers working 360 days in the year, and five days' pay to workers working 300 days, in Yung Chong Match Manufacturing Co.) in the match industry; China Enamel Co. (no female workers) in the enamel industry; all factories in the cotton spinning industry; Loong Tsong in the paper industry; and Chung Ho and Ho Hsing (no female workers) in the tobacco industry. In the above-mentioned establishments, labor forces of appreciable size are employed and rewards are given in large sums. Thus the average earnings in the respective industries are raised. In some other establishments, such as Loong Kee Glass Factory in the glass industry, and Lih Teh Oil Mill in the oil industry, special rewards are also given. But, either due to the fact that laborers employed in these establishments constitute only a small percentage of the entire labor force in the respective industries, or that these rewards do not amount to a big sum, or else that these rewards are paid only to a part of the laborers, the level of the average earnings in these industries are elevated only to a moderate degree. However, the high average earnings in the sawing and silk reeling industries in January cannot be attributed to the effect of special rewards. They are rather due to an increase in the number of days worked in the period, which as another important cause of fluctuations in earnings is the subject matter of the next section. In the month of December, rewards and double pay for the end of the year are given in the following establishments: China Merchants' Electricity Co. in the electricity industry; Tien Ih Ve Tsing Factory in the canned goods industry; Aquarius Co. in the cold drinks and refrigerating industry; China Iron Works (less in amount than the rewards given by Hwa Tung Engineering Plant in January) in the machinery industry; and Commercial Press (less in amount than the bonus distributed in June), and Wen Ming Printing Co. in the printing. These facts explain the high earnings in December in the said industries. Rewards for the end of the year and extra pay for regular attendance are given in December in the International Soap Works. But as such rewards are paid only to a part of the laborers, the average earnings in the soap and candle industry are not greatly increased.

**2. Number  
of days  
worked**

The number of days worked is a variable factor, which has an important bearing upon the fluctuations of workers' earnings. From the standpoint of employers, the number of days worked in the month varies as business is prosperous or depressing, or as the material worked on is abundant or lacking. A drop in the number of days below the normal would result in a decrease in the average earnings; and additional working days automatically increase the earnings. Again, the size of the establishments in which such variations in the number of days occur also comes into play. The

smaller the size the less significant will be the ultimate effect. From the standpoint of laborers, the condition is similar. In case the number of days worked is below normal for a majority of laborers, the average earnings would inevitably be lower. The reverse is true, when a great number of workers work additional days. The effect of the variations in the number of days worked is especially striking in the case of piece workers. The length of time worked determines the amount of their outputs. Any variations in the amount of output has a direct influence upon their earnings. The month of February, 1929, correspond to a period extending from 22nd. of the 12th. moon of the lunar year to 19th. of the first moon the next year. It is in this period, as a rule, that the number of working days in most establishments is curtailed. Such curtailment of days worked has very little effect, if any, upon the earnings of workers paid by the month. Nevertheless, it tends to cut down the earnings of piece workers to an extent directly proportional to the number of days reduced. A survey of the establishments wherein earnings are especially low in February will help to prove the statement. In the sawing industry, the Lamkat Timber Department operated for 18 days in February; other establishments in the same industry operated for less than the normal number of working days. In the machinery industry, all establishments operated for less than 20 days. In the industry of electrical machines and appliances, China General Edison Co., Yih Chung, and some of the big plants operated for 20 days; no regular work was done in the other establishments. In the ship-building industry, the New Engineering and Ship-building Works operated for 20 days, and the Shanghai Dock and Engineering Co. for less than the normal number of days. In the match industry, Chung Hwa Match Manufacturing Co. operated for 20 days, Lee Ming for 14 days, and Yung Chong for 12 days. In the silk reeling industry, more than a dozen establishments suspended work entirely, the rest operated for less than the normal number of days. In the silk weaving industry, only a few establishments operated for about a week. In the cotton weaving industry, no establishments operated for the whole month. In the knitting industry, Kung Tsoh Hosiery Manufacturing Co. is the only establishment operating for 30 days; large plants like the Chung Hwa Knitting Works, Mill No. 1, ceased operation for more than half a month. In wool weaving, tanning, and egg and egg products industries, operations in various establishments were not uniform. In the tobacco industry, rewards are given for business prosperity by the Hwa Chen Tobacco Co., however the female workers worked for 14 days only; consequently, the average earnings, instead of being forced up by the giving of rewards, were dragged down by the decrease in the number of days worked. The downward move of the earnings in foundry, electricity, water works, candle and soap, oil, and paper industries in February

can likewise be ascribed to the effect of the reduction in the number of days worked. The month of January corresponds to a period extending from 21st. of the 11th. moon to 21st. of the 12th. moon of the lunar year. This is the period when the large financial needs of the year-end (lunar calendar) is approaching, and workers are anxious to earn more by working hard in order to meet their emergencies. Greater efficiency in work and shorter intervals for rest naturally put the earnings on a higher level. This factor alone, without considering the rewards and bonuses given in this month, would be enough to raise the earnings to a certain extent as is manifested in the case of the sawing and silk reeling industries.

### 3. Seasonal variations

Seasonal variations result from changes in weather and are evidenced by a shifting in the extent of business activities. The intense heat in the months of June, July, and August necessitates that intervals between work be longer and more frequent. Thus, both time and piece workers are affected in that their working hours and consequently their outputs are curtailed. It is, therefore, only to be expected that in July and August of the year 1929, where there are no other factors to offset the influence of the hot weather, the trend of earnings should assume a downward swing. Notwithstanding the persistent force of the seasonal changes, the fluctuations of the earnings in the months of July and August are not so severe as in January, February, and December.

It might be interesting to see how this seasonal factor works in the various industries. The ship-building, match, silk weaving, knitting, cold drinks and refrigerating, and tobacco industries are marked by abnormal fluctuations. Among them, piece rate system prevails in the ship-building, silk weaving, silk and cotton knitting, and tobacco industries, in which workers' earnings vary from month to month. In the match industry, the amount of outputs varies with the condition of weather. On fine days, a large size plant can put out about 90 boxes of matches daily; while on rainy days, fifty or sixty boxes are the maximum produce per day. The industry of cold drinks and refrigerating has its boom time in the summer. But the manufacturing work is not carried on all at once in this rush season. Hence the earnings in the summer months are not high at all. In the industries wherein workers' earnings fluctuate only slightly, such as the foundry, machinery, cement and tiles, electricity, water works, silk reeling, flour, oil, and bleaching and dyeing, monthly rates prevails in a majority of the establishments. Seasonal changes, therefore, have little effect upon them. Conspicuous changes in the earnings of these industries occur only when there is a giving of rewards or bonuses, shortage of materials, or similar incidents.

In a preceding section, it has been pointed out that exceptions are to be found in the classification of the months of the year into months of normal and abnormal fluctuations. The causes of these exceptional cases might be formulated as follows: In March, the high earnings in the ship-building industry was the result of the distribution of bonuses in the Kiangnan Ship-building Works; that in the knitting industry was due to a prolongation of the working time in Chung Hwa Knitting Works, Mill No. 1, and in other establishments subsequent to a period of business prosperity. In April, the high earnings in the toilet preparation industry can be ascribed to the effect of the wage increase in the Yung Ho Industrial Co. In June, the high earnings in the printing industry was a result of the distribution of bonuses in the Commercial Press; and the low earnings in the cement and tiles industry was effected by a strike of 11 days in the Tai Shan Tile Co. In July, the low earnings in the enamel industry was due to the strike in the Chi Foong Enamel Factory.

**Other modifying factors** So much for the three chief causes of fluctuations in workers' earnings. But, there are other factors which tend to modify, though to a less extent, the movements of the earnings. Some of these factors might be discussed briefly as follows:

(1) **Strikes** A strike means the cessation of work in the establishments involved. Such stoppage of work is usually accompanied by a temporary suspension of wage payments. But this is not always true. Not infrequently wages are paid for the period of strike in full or in part. Therefore strikes affect the level of earnings only when wages are suspended or discounted during the period of cessation of work.

(2) **Changes in the proportion of male, female, and child workers** Changes in the proportion of the male, female, and child workers, such as a reduction of child workers with a subsequent increase in the number of male workers, or a reduction of female workers with an increase of child workers, would have quite a significant effect upon the average earnings of the workers. But, as we have, in compiling the index numbers, treated the earnings of male, female, and child workers separately, this variable factor has been well taken care of.

(3) **Changes in number of skilled and unskilled laborers** An increase or decrease in the number of skilled or unskilled laborers always tend to modify the average earnings. In this study we fail to take this factor into consideration, as we have no standard to measure the skill of workers. In the statistics of wage rates, which is a new field of research taken up by the Bureau, and which appears in the same publication, a classification of occupations is made for each industry. Such a

classification helps to determine the skill of the laborers. The different nature of the occupations indicates the different amount of skill required. Therefore, what fails in this study in showing the relationship between workers' earnings and workers' skill will be found in the statistics of wage rates.

Table of  
average  
monthly  
earnings

The average monthly earnings of factory laborers of various industries in Greater Shanghai for the year 1929 are shown in the following table:

TABLE 47  
 AVERAGE MONTHLY EARNINGS OF FACTORY LABORERS IN VARIOUS INDUSTRIES,  
 GREATER SHANGHAI, 1929

| INDUSTRY AND TYPE OF WORKERS                                              |                                    |                    | JAN.     | FEB.     | MAR.     | APR.     | MAY      | JUNE     | JULY     | AUG.     | SEP.     | OCT.     | NOV.     | DEC.     | MONTHLY AVERAGE |
|---------------------------------------------------------------------------|------------------------------------|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------------|
| I. Wood Working                                                           | Sawing                             | Male <sup>1</sup>  | \$ 20.87 | \$ 13.74 | \$ 18.79 | \$ 19.57 | \$ 20.53 | \$ 18.61 | \$ 19.18 | \$ 20.68 | \$ 19.41 | \$ 20.18 | \$ 19.57 | \$ 19.30 | \$ 19.25        |
|                                                                           |                                    | Female             | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —               |
|                                                                           |                                    | Child              | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —               |
| II. Metallurgy                                                            | Foundry                            | Male <sup>1</sup>  | 21.12    | 21.42    | 23.45    | 23.78    | 22.97    | 22.91    | 22.91    | 24.32    | 24.82    | 26.47    | 26.68    | 25.32    | 23.81           |
|                                                                           |                                    | Female             | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —               |
|                                                                           |                                    | Child              | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —               |
| III. Machinery and Metal Tools and Utensils                               | Machinery                          | Male <sup>1</sup>  | 36.47    | 23.09    | 29.85    | 28.91    | 28.65    | 27.81    | 28.17    | 28.64    | 30.73    | 27.10    | 28.13    | 36.07    | 29.53           |
|                                                                           |                                    | Female             | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —               |
|                                                                           |                                    | Child              | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —               |
|                                                                           | Electrical Machines and Appliances | Male <sup>1</sup>  | 29.57    | 17.21    | 26.29    | 23.43    | 23.24    | 22.35    | 22.38    | 21.44    | 22.67    | 24.52    | 23.63    | 25.36    | 23.49           |
|                                                                           |                                    | Female             | 15.99    | 8.99     | 12.40    | 12.35    | 13.13    | 11.44    | 11.97    | 12.14    | 12.52    | 14.09    | 13.84    | 13.68    | 12.72           |
|                                                                           |                                    | Child <sup>2</sup> | 20.88    | —        | 12.40    | 10.86    | 6.90     | 6.10     | 6.93     | 10.93    | 10.23    | 10.24    | 10.24    | —        | 12.95           |
| IV. Construction of Boats, Ships, and Vehicles for Land and Air Transport | Ship-building                      | Male <sup>1</sup>  | 44.68    | 30.77    | 46.37    | 41.71    | 38.22    | 38.90    | 36.07    | 32.94    | 36.99    | 35.13    | 33.42    | 34.98    | 38.20           |
|                                                                           |                                    | Female             | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —               |
|                                                                           |                                    | Child              | 15.86    | 16.08    | 20.97    | 17.81    | 13.80    | 14.01    | 15.73    | 14.72    | 13.24    | 13.19    | 13.36    | 12.45    | 15.25           |

TABLE 47

AVERAGE MONTHLY EARNINGS OF FACTORY LABORERS IN VARIOUS INDUSTRIES,  
GREATER SHANGHAI, 1929—*Continued*

| INDUSTRY AND TYPE OF WORKERS                       |                   |                    | JAN.     | FEB.     | MAR.     | APR.     | MAY      | JUNE     | JULY     | AUG.     | SEP.     | OCT.     | NOV.     | DEC.     | MONTHLY AVERAGE |   |
|----------------------------------------------------|-------------------|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------------|---|
| V. Manufacture of Bricks, Earthenware, Glass, etc. | Glass             | Male <sup>1</sup>  | \$ 17.97 | \$ 15.83 | \$ 16.56 | \$ 16.50 | \$ 16.52 | \$ 16.77 | \$ 15.17 | \$ 15.34 | \$ 16.54 | \$ 14.32 | \$ 16.62 | \$ 17.38 | \$ 16.25        |   |
|                                                    |                   | Female             | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —               | — |
|                                                    |                   | Child              | 10.10    | 11.23    | 11.95    | 8.87     | 9.96     | 9.90     | 8.59     | 8.36     | 9.30     | 8.18     | 9.06     | 8.36     | 9.44            |   |
|                                                    | Cement and Tiles  | Male <sup>1</sup>  | 27.74    | 17.28    | 19.07    | 19.61    | 19.10    | 15.20    | 18.27    | 18.31    | 18.63    | 18.83    | 19.34    | 21.19    | 19.09           |   |
|                                                    |                   | Female             | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —               |   |
|                                                    |                   | Child              | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —               |   |
| VI. Electricity and Water Works                    | Electricity       | Male <sup>1</sup>  | 25.97    | 25.04    | 26.04    | 25.07    | 25.69    | 25.84    | 25.99    | 25.91    | 26.37    | 26.16    | 25.31    | 33.77    | 25.89           |   |
|                                                    |                   | Female             | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —               |   |
|                                                    |                   | Child              | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —               |   |
|                                                    | Water Works       | Male <sup>1</sup>  | 54.34    | 24.32    | 24.46    | 24.47    | 24.52    | 24.54    | 24.57    | 24.51    | 24.58    | 24.63    | 24.96    | 35.48    | 27.97           |   |
|                                                    |                   | Female             | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —               |   |
|                                                    |                   | Child              | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —               |   |
| VII. Manufacture of Chemicals and Allied Products  | Soap and Candle   | Male <sup>1</sup>  | 20.70    | 15.30    | 18.71    | 18.36    | 19.70    | 17.07    | 16.57    | 17.90    | 18.83    | 19.35    | 20.78    | 21.03    | 18.72           |   |
|                                                    |                   | Female             | 8.94     | 6.00     | 10.52    | 10.21    | 10.33    | 8.87     | 7.42     | 8.10     | 8.94     | 9.53     | 9.20     | 10.75    | 8.75            |   |
|                                                    |                   | Child <sup>3</sup> | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —               |   |
|                                                    | Paint and Varnish | Male <sup>1</sup>  | 28.22    | 18.50    | 18.86    | 18.46    | 22.39    | 18.25    | 16.39    | 17.37    | 17.06    | 17.38    | 16.98    | 14.12    | 18.37           |   |
|                                                    |                   | Female             | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —               |   |
|                                                    |                   | Child              | 10.79    | 10.25    | 11.94    | 15.00    | 12.00    | 9.99     | 10.17    | 10.14    | 10.36    | 10.56    | 10.19    | 10.25    | 11.51           |   |

TABLE 47

AVERAGE MONTHLY EARNINGS OF FACTORY LABORERS IN VARIOUS INDUSTRIES,  
GREATER SHANGHAI, 1929—*Continued*

| INDUSTRY AND TYPE OF WORKERS                                           |                    |                     | JAN.     | FEB.     | MAR.     | APR.     | MAY      | JUNE     | JULY     | AUG.     | SEP.     | OCT.     | NOV.     | DEC.     | MONTHLY AVERAGE |
|------------------------------------------------------------------------|--------------------|---------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------------|
| VII. Manufacture of Chemicals and Allied Products—<br><i>Continued</i> | Match              | Male <sup>1</sup>   | \$ 30.57 | \$ 11.70 | \$ 20.87 | \$ 20.89 | \$ 23.50 | \$ 20.64 | \$ 20.28 | \$ 19.32 | \$ 22.00 | \$ 21.87 | \$ 22.13 | \$ 21.17 | \$ 21.39        |
|                                                                        |                    | Female              | 5.02     | 4.28     | 5.09     | 5.32     | 6.92     | 5.45     | 5.33     | 5.02     | 6.14     | 6.17     | 6.60     | 5.46     | 5.51            |
|                                                                        |                    | Child               | 17.31    | 4.98     | 9.22     | 7.61     | 12.02    | 10.96    | 11.18    | 9.93     | 12.75    | 13.20    | 12.72    | 12.76    | 11.38           |
|                                                                        | Enamelling         | Male <sup>1</sup>   | 21.55    | 17.04    | 17.06    | 17.55    | 18.30    | 17.90    | 14.69    | 16.42    | 18.61    | 19.22    | 19.24    | 19.13    | 18.03           |
|                                                                        |                    | Female              | 8.00     | 6.84     | 8.02     | 7.33     | 7.46     | 7.52     | 4.65     | 9.15     | 10.85    | 9.35     | 9.83     | 9.87     | 8.31            |
|                                                                        |                    | Child               | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —               |
|                                                                        | Toilet Preparation | Male <sup>1</sup>   | 19.00    | 19.23    | 19.38    | 22.82    | 20.27    | 20.00    | 19.85    | 17.14    | 18.67    | 18.35    | 18.01    | 18.34    | 19.65           |
|                                                                        |                    | Female              | 7.67     | 5.10     | 13.19    | 10.33    | 6.89     | 4.88     | 9.14     | 7.66     | 10.25    | 10.49    | 8.41     | 9.20     | 8.76            |
|                                                                        |                    | Child               | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —               |
| VIII. Textiles                                                         | Silk Reeling       | Male                | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —               |
|                                                                        |                    | Female <sup>1</sup> | 15.87    | 5.56     | 14.49    | 14.18    | 12.55    | 13.96    | 12.97    | 12.44    | 14.25    | 14.96    | 13.39    | 12.38    | 13.21           |
|                                                                        |                    | Child               | 9.76     | 3.62     | 9.11     | 8.73     | 7.72     | 8.98     | 9.63     | 7.92     | 9.08     | 9.47     | 8.18     | 7.36     | 8.37            |
|                                                                        | Cotton Spinning    | Male                | 17.49    | 14.75    | 15.93    | 15.71    | 14.89    | 14.95    | 14.44    | 14.50    | 14.79    | 14.85    | 15.29    | 15.59    | 15.28           |
|                                                                        |                    | Female <sup>1</sup> | 14.22    | 12.50    | 13.70    | 13.32    | 12.32    | 11.32    | 11.45    | 11.52    | 12.40    | 13.42    | 12.64    | 11.64    | 12.50           |
|                                                                        |                    | Child               | 9.37     | 8.94     | 7.70     | 7.09     | 8.72     | 8.50     | 8.17     | 7.65     | 8.18     | 7.28     | 7.63     | 7.82     | 8.07            |
| Silk Weaving                                                           | Male <sup>1</sup>  | 27.73               | 6.97     | 23.19    | 32.12    | 30.21    | 32.91    | 29.46    | 31.27    | 32.37    | 33.30    | 32.02    | 33.82    | 30.31    |                 |
|                                                                        | Female             | 22.18               | —        | 17.85    | 20.62    | 20.04    | 19.60    | 19.05    | 19.03    | 19.40    | 22.11    | 21.93    | 19.82    | 20.17    |                 |
|                                                                        | Child <sup>4</sup> | —                   | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        |                 |



TABLE 47

AVERAGE MONTHLY EARNINGS OF FACTORY LABORERS IN VARIOUS INDUSTRY,  
GREATER SHANGHAI, 1929—*Continued*

| INDUSTRY AND TYPE OF WORKERS                 |                          |                   | JAN.     | FEB.     | MAR.     | APR.     | MAY      | JUNE     | JULY     | AUG.     | SEP.     | OCT.     | NOV.     | DEC.     | MONTHLY AVERAGE |
|----------------------------------------------|--------------------------|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------------|
| VIII. Textiles—<br><i>Continued</i>          | Cotton Weaving           | Male <sup>1</sup> | \$ 24.51 | \$ 15.29 | \$ 24.99 | \$ 25.14 | \$ 23.75 | \$ 23.01 | \$ 20.15 | \$ 22.37 | \$ 25.30 | \$ 24.78 | \$ 25.54 | \$ 25.30 | \$ 23.54        |
|                                              |                          | Female            | 11.40    | 8.77     | 12.85    | 12.16    | 12.33    | 11.50    | 9.89     | 11.56    | 12.19    | 12.05    | 13.84    | 11.50    | 11.69           |
|                                              |                          | Child             | 13.89    | 12.21    | 18.48    | 18.24    | 17.82    | 17.63    | 16.34    | 17.54    | 15.67    | 17.97    | 17.95    | 17.94    | 18.09           |
|                                              | Silk and Cotton Knitting | Male <sup>1</sup> | 15.02    | 12.02    | 20.64    | 19.08    | 20.49    | 18.73    | 17.10    | 18.98    | 18.98    | 18.29    | 17.97    | 17.29    | 18.83           |
| Female                                       |                          | 13.19             | 9.69     | 15.77    | 17.21    | 17.74    | 16.72    | 15.73    | 14.73    | 15.84    | 16.29    | 15.84    | 14.45    | 15.41    |                 |
| Child                                        |                          | —                 | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        |                 |
| Wool Weaving                                 | Male <sup>1</sup>        | 17.81             | 13.39    | 16.41    | 17.22    | 17.63    | 16.16    | 14.15    | 16.06    | 17.18    | 17.32    | 17.82    | 17.34    | 16.54    |                 |
|                                              | Female                   | 6.90              | 4.75     | 8.75     | 9.85     | 12.90    | 11.81    | 8.16     | 9.73     | 10.93    | 9.71     | 11.76    | 8.46     | 9.43     |                 |
|                                              | Child                    | —                 | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        |                 |
| Bleaching and Dyeing                         | Male <sup>1</sup>        | 25.79             | 21.66    | 25.72    | 22.47    | 21.77    | 20.44    | 19.83    | 20.34    | 20.23    | 21.42    | 19.88    | 19.54    | 21.60    |                 |
|                                              | Female                   | —                 | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        |                 |
|                                              | Child                    | —                 | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        |                 |
| IX. Manufacture of Leather, Skin, and Rubber | Tanning                  | Male <sup>1</sup> | 20.73    | 16.46    | 19.48    | 19.60    | 19.85    | 18.79    | 22.23    | 20.88    | 21.28    | 22.15    | 22.29    | 21.68    | 20.39           |
|                                              |                          | Female            | 13.82    | 14.10    | 9.55     | 12.94    | 11.53    | 13.05    | 11.90    | 10.32    | 13.32    | 12.96    | 14.30    | 13.44    | 12.32           |
|                                              |                          | Child             | 7.49     | 11.05    | 8.36     | 9.53     | 8.46     | 6.67     | 6.44     | 6.44     | 6.63     | 7.02     | 7.54     | 7.28     | 8.41            |
| X. Manufacture of Food, Drinks, and Tobacco  | Flour                    | Male <sup>1</sup> | 18.62    | 17.42    | 17.87    | 17.90    | 17.81    | 17.91    | 17.86    | 16.35    | 17.49    | 17.37    | 17.39    | 17.47    | 17.61           |
|                                              |                          | Female            | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —               |
|                                              |                          | Child             | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —               |

TABLE 47

AVERAGE MONTHLY EARNINGS OF FACTORY LABORERS IN VARIOUS INDUSTRIES,  
GREATER SHANGHAI, 1929—*Continued*

| INDUSTRY AND TYPE OF WORKERS                                     |                               |                                      | JAN.                    | FEB.                   | MAR.                    | APR.                   | MAY                   | JUNE                   | JULY                    | AUG.                   | SEP.                   | OCT.                   | NOV.                   | DEC.                   | MONTHLY AVERAGE        |
|------------------------------------------------------------------|-------------------------------|--------------------------------------|-------------------------|------------------------|-------------------------|------------------------|-----------------------|------------------------|-------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| X. Manufacture of Food, Drinks, and Tobacco—<br><i>Continued</i> | Oils and their By-products    | Male <sup>1</sup><br>Female<br>Child | \$ 18.56<br>—<br>—      | \$ 16.16<br>—<br>—     | \$ 17.09<br>—<br>—      | \$ 17.54<br>—<br>—     | \$ 17.25<br>—<br>—    | \$ 17.45<br>—<br>—     | \$ 17.94<br>—<br>—      | \$ 17.13<br>—<br>—     | \$ 16.57<br>—<br>—     | \$ 17.33<br>—<br>—     | \$ 16.67<br>—<br>—     | \$ 17.10<br>—<br>—     | 17.28<br>—<br>—        |
|                                                                  | Egg and Egg-products          | Male <sup>1</sup><br>Female<br>Child | 22.58<br>4.43<br>—      | 15.40<br>2.31<br>—     | 18.81<br>10.82<br>—     | 18.35<br>12.50<br>—    | 21.56<br>14.23<br>—   | 21.06<br>14.41<br>—    | 22.79<br>13.17<br>—     | 21.09<br>11.07<br>—    | 21.60<br>10.72<br>—    | 23.45<br>13.05<br>—    | 21.89<br>12.23<br>—    | 22.85<br>13.16<br>—    | 20.89<br>11.65<br>—    |
|                                                                  | Canned Foods                  | Male <sup>1</sup><br>Female<br>Child | 24.72<br>13.37<br>—     | 21.80<br>7.30<br>—     | 20.02<br>8.97<br>—      | 22.34<br>8.26<br>—     | 23.11<br>8.26<br>—    | 22.43<br>7.79<br>—     | 23.83<br>7.53<br>—      | 31.33<br>15.26<br>—    | 25.62<br>14.01<br>—    | 24.66<br>10.31<br>—    | 26.38<br>12.91<br>—    | 41.69<br>14.53<br>—    | 25.81<br>11.05<br>—    |
|                                                                  | Cold Drinks and Refrigerating | Male <sup>1</sup><br>Female<br>Child | 22.04<br>—<br>—         | 20.09<br>—<br>—        | 18.88<br>—<br>—         | 19.30<br>—<br>—        | 17.26<br>—<br>—       | 17.82<br>—<br>—        | 17.95<br>—<br>—         | 15.14<br>—<br>—        | 19.72<br>—<br>—        | 18.72<br>—<br>—        | 16.51<br>—<br>—        | 32.53<br>—<br>—        | 18.94<br>—<br>—        |
|                                                                  | Tobacco                       | Male<br>Female <sup>1</sup><br>Child | 30.05<br>12.91<br>12.19 | 24.21<br>8.08<br>8.41  | 20.51<br>12.97<br>10.19 | 26.73<br>13.69<br>5.74 | 21.17<br>9.78<br>6.37 | 22.11<br>10.35<br>6.35 | 24.51<br>12.64<br>12.73 | 23.62<br>13.84<br>9.69 | 21.44<br>15.47<br>9.69 | 23.78<br>15.52<br>5.46 | 23.21<br>15.18<br>9.44 | 24.80<br>14.70<br>8.17 | 23.86<br>12.82<br>9.38 |
| XI. Paper and Printng                                            | Paper                         | Male <sup>1</sup><br>Female<br>Child | 26.68<br>5.49<br>8.95   | 18.42<br>5.05<br>10.06 | 20.70<br>9.70<br>9.76   | 19.80<br>8.64<br>8.86  | 21.04<br>9.80<br>7.17 | 20.24<br>9.72<br>9.87  | 20.79<br>10.23<br>9.39  | 18.79<br>9.42<br>9.44  | 19.59<br>10.03<br>9.91 | 18.95<br>9.42<br>11.18 | 21.12<br>9.45<br>8.62  | 21.26<br>9.37<br>8.93  | 20.60<br>8.72<br>9.46  |

TABLE 47

AVERAGE MONTHLY EARNINGS OF FACTORY LABORERS IN VARIOUS INDUSTRIES,  
GREATER SHANGHAI, 1929—*Continued*

| INDUSTRY AND TYPE OF WORKERS |          |                   | JAN.     | FEB.     | MAR.     | APR.     | MAY      | JUNE     | JULY     | AUG.     | SEP.     | OCT.     | NOV.     | DEC.     | MONTHLY AVERAGE |
|------------------------------|----------|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------------|
| XI. Paper and Printing       | Printing | Male <sup>1</sup> | \$ 42.12 | \$ 42.41 | \$ 45.03 | \$ 43.86 | \$ 47.80 | \$ 73.63 | \$ 37.93 | \$ 38.04 | \$ 40.89 | \$ 46.11 | \$ 37.41 | \$ 72.85 | 47.50           |
|                              |          | Female            | 27.90    | 28.01    | 35.56    | 35.56    | 39.11    | 40.56    | 22.38    | 21.21    | 24.04    | 36.94    | 29.50    | 37.38    | 31.24           |
|                              |          | Child             | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —        | —               |

<sup>1</sup>Principal type of workers in the industry.

<sup>2</sup>Only one factory, the Crison Crucible Manufacturing Co., in the industry of electrical machines and appliances employs child workers. Work for child workers suspended during the months of February and December.

<sup>3</sup>In the soap and candle industry, child workers had been employed by the China Soap Co., but no longer employed this year.

<sup>4</sup>Wages of child workers in the silk weaving industry have been increased to the level of adult workers. Work for female workers suspended in February.

## Where To Find Statistical Information On Labor Problem In Greater Shanghai

The results of the investigations on labor problem conducted by the Bureau of Social Affairs of the City Government of Greater Shanghai will be found embodied in the following publications compiled by the Bureau:

**1928**

**Annual Report on Labor Strikes in Greater Shanghai**  
**Report on Industrial Disputes in Greater Shanghai**  
**The Index Numbers of Earnings of the Factory Laborers in Greater Shanghai**

The above publications can be obtained at Dah Tung Book Company, 99 Foochow Road, Shanghai, at \$1.20 per copy.

**1929**

**Strikes and Lockouts, Greater Shanghai. Price \$3.50**  
**Industrial Disputes—Not Including Strikes and Lockouts, Greater Shanghai. Price \$5.00**  
**Wages and Hours of Labor, Greater Shanghai.**

**1930**

**The Cost of Living Index Numbers, Greater Shanghai. (On press)**  
**The Standard of Living of Laborers, Greater Shanghai. (In preparation)**  
**Strikes and Lockouts, Greater Shanghai. (On press)**  
**Industrial Disputes—Not Including Strikes and Lockouts, Greater Shanghai. (On press)**  
**Wages and Hours of Labor, Greater Shanghai. (In preparation)**

In addition to the above, the Bureau has also translated the following books into Chinese:

**Methods of Compiling Cost of Living Index Numbers. Price \$0.40**  
**Methods of Compiling Unemployment Statistics. Price \$0.35**  
**Methods of Statistics of Collective Agreements. Price \$0.30**  
**Methods of Statistics of Industrial Accidents. Price \$0.50**  
**Methods of Conducting Family Budget Enquiries. (On press)**  
**Housing Situation in the United States. (On press)**

The above publications are obtainable at The Commercial Press, Limited, Honan Road, Shanghai.

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民國十八年

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WAGES AND HOURS OF LABOUR

GREATER SHANGHAI, 1929

BY BUREAU OF SOCIAL AFFAIRS

THE CITY GOVERNMENT OF GREATER SHANGHAI

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# 上海特別市社會局編

商務印書館發行

## 上海特別市罷工停業統計

民國十八年

定價三元五角

Strikes and Lockouts, Greater Shanghai, 1929

上海市政府社會局鑒於勞工問題之重大，關於勞資狀況，悉心調查，依照年度，編製整個的有系統的報告。茲出十八年度罷工停業統計，舉凡材料的來源、編製的方法、案件的始末、研究的結果、源源本本，據實列入。文字圖表，中英並載。分析編製，極爲精審。不但爲研究勞動問題者必不可少的參考資料，且可作此後全國各地方政府舉辦同類統計的表率。編首有陶孟和、盛俊、馬寅初諸先生及主辦此項統計的蔡正雅先生的序文。

## 上海特別市勞資糾紛統計

民國十八年

定價五元

Industrial Disputes, Greater Shanghai, 1929

本編材料搜集極爲豐富，編製方法亦稱精審，其所載調解決定書及仲裁裁決書，實爲外界不易得到之資料。篇末附錄勞資糾紛案件原因及結果分析索引二則，檢閱探討，尤屬便利。文字圖表，中英並載。清華大學教授陳達先生序云：『此種關於勞資問題的事實之搜集與分析，實爲工業和平開一條光明大路。』中央研究院楊杏佛先生序謂：『此種冷僻工作實爲極熱烈的革命家所不可少之工具。』主辦此項統計的蔡正雅先生序云：『用有系統的方法，以調查觀察並紀錄事實，固非空言事實者可比，而尤爲人力控制社會力之嘗試。』云。



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