

## Manufactures of the State

WHEN the topic of manufactures in the United States is brought up, Connecticut moves to the front, and at once comes into her own. The cunning of American ingenuity finds probably its greatest display in that State. Its people not only know how to make tools, but how to use them with extraordinary facility. Its towns are invariably mill towns. More black smoke arises to the sky in the square mile there than in any other State of the Union, and in the short afternoons, as twilight deepens into darkness, there are no more brilliant sights than the glowing thousands upon thousands of lights from the valley factories of Connecticut. The ungainly outlines of the great buildings are lost, and the gleaming lights make a fairylike effect which tells a story of industry more picturesquely than any "hum of industry" in the daytime can proclaim it.

It is a fact of great significance that at one time in 1900 more than 23 per cent. of the entire population of the State was engaged as wage-earners in what may be called factory work. When one considers the number of the "business class," the number of women and children engaged in domestic work and in schools, the number of persons occupied with agricultural pursuits, this percentage of those at work in manufactures is simply astonishing. Practically one person in every four in the State was employed in the workshop in 1900.

The recent census investigators found 10,115 manufacturing establishments in Connecticut, of which 5607, or 55.4 per cent., were what are called "hand-trade" places. These hand-trade shops, however, produced only nine per cent. of the manufactures of the State. In these 10,000 establishments of various kinds there was invested a capital of nearly \$315,000,000. The gross value of the products for 1900 of these establishments was the enormous sum of nearly \$353,000,000. Of this production, \$145,000,000 was made up of material in a partly manufactured form, leaving the sum of \$208,000,000 as the net or true value of the State's manufacturing products, equalling about 60 per cent. of the capital employed.

The total wages paid for labor in 1900 were nearly \$83,000,000, or, in round numbers, 40 per cent. of the net income. These figures indicate at once a condition of great prosperity for mill-owners and wage-earners alike. Out of their share of the \$208,000,000, or \$125,000,000 on a capital of \$315,000,000, the mill-owners had to pay for raw material, for repairs and maintenance of plants, and for interest on capital, besides salaries to themselves and clerks and the expenses of distribution, leaving the balance for net profit. What the percentage of this profit was, of course is not known, but it is fair to surmise that it was simply an equitable distribution of the results of work with the manual laborers employed.

It may be worth while to note, while the matter of wages is under consideration, that the 130,000 men employed in the State's factories in 1900 earned \$69,000,000; the 42,500 women employed earned \$13,000,000, and the 3500 children employed earned \$670,000. The amount paid to clerks and officials engaged in manufacturing work was \$12,000,000 in round numbers.

There are eleven industries in which ten years ago Connecticut led the rest of the United States, and the indications are that the State still holds its primacy in these fields. They are the manufacture of ammunition, bells, rolled brass and copper, brass casting and finishing, brassware, clocks, corsets, cutlery and edged tools, hardware, plated and britannia ware, needles and pins. In addition to this the State ranks sixth in the great textile industry of the country, being exceeded in the output only by Massachusetts, Pennsylvania, New York, Rhode Island, and New Jersey.

Before one considers what the pre-eminence in these eleven industries means to the State it is well to dwell for a moment on a remarkable showing disclosed by researches into the industrial development of the commonwealth. That is the fact that out of the 10,000 active manufacturing establishments of the State only fifty-six were idle during the year 1900. These represented a capital of \$1,500,000, out of a total of \$315,000,000. The largest number of idle establishments in any in

dustry was in the making of bricks and tiles. There were five of these idle, but the capital involved was only \$11,000. The largest amount of capital involved in any industry in an idle condition was \$500,000, and that was in a ship-building plant. Three brass-casting and brass-finishing establishments were idle, involving a capital of \$320,000, and one mill making paper goods did no work, involving a capital of \$150,000. All the other idle establishments were of small importance. Such a showing of industry is probably matched by no other commonwealth in the country. It reveals at a glance the highly prosperous condition of the State, both to wage-workers and mill-owners, and it makes plain the story of the satisfactory condition of the working-man of this country today.

It has long been a precept of certain economists that diversified industry was the chief end to be gained in the development of the country. If that is so, Connecticut should lead in prosperity, for out of the 359 classifications of manufactured articles set apart by the Census Bureau for investigation, Connecticut makes 249, or 69.4 per cent. It is doubtful if any commonwealth makes such a showing. Not until the statistics of all the States are tabulated can it be learned if the State leads in this respect, but it is probable that it does.

With regard to the chief industries in the State a few figures will tell what they mean in the way of prosperity. Here is a paragraph from the census bulletin which reveals the entire story:

The increase in the value of products during the decade from 1890 to 1900 in the leading industries was—ammunition, 155.9 per cent.; hats, 206.7 per cent.; buttons, 17.2 per cent.; brass manufactures, 117.5 per cent.; carriages and wagons, 16.9 per cent.; clocks, 45.8 per cent.; corsets, 9.1 per cent.; cutlery and edge tools, 85.2 per cent.; envelopes, 75.7 per cent.; fire-arms, 31.9 per cent.; foundry and machine-shop products, 42.6 per cent.; fur hats, 7.6 per cent.; hardware, 35.9 per cent.; hardware saddlery, 49.7 per cent.; hosiery and knit goods, 7.2 per cent.; iron-work, architectural and ornamental, 82.4 per cent.; musical instruments, pianos and materials, 109 per cent.; needles and pins, 123.9 per cent.; plated and britannia ware, 26 per cent.; rubber and elastic goods, 137.2 per cent.; sewing-machines and attachments, 26 per cent.; silk and silk goods, 26.5 per cent.; stamped ware, 106.6 per cent.; and type-writers and supplies, 63.1 per cent.

If figures showing totals are desired, these may be of interest: The increase in product in 1900 over 1890 in the making of ammunition was from \$3,800,000 to \$9,800,000; brass manufactures, from \$22,000,000 to \$48,000,000; clocks, from \$3,100,000 to \$4,500,000; cutlery and edged tools, from \$2,800,000 to \$5,300,000; foundry and machine products, from \$13,000,000 to \$19,000,000; hardware, from \$12,000,000 to \$16,000,000; needles and pins, from \$700,000 to \$1,700,000; rubber and elastic goods, from \$3,000,000 to \$8,000,000; sewing-machines, from \$1,500,000 to \$3,000,000; silk and silk goods, from \$9,300,000 to \$12,300,000.

In the dyeing and finishing of textiles there was an increase of from \$715,000 to \$2,200,000.

Of the manufacturing establishments in the State in 1900, 45.5 per cent. were established during the decade from 1890, but the total increase in the number of manufacturing establishments in ten years was only 33.8 per cent., showing that many must have gone out of business during the ten years. Most of the new industries established in the ten years were hand trades, and therefore their establishment or discontinuance affected the total output of the State's activity only to a limited extent.

Six cities, having each more than 20,000 population, lead in the manufacturing activity of the State. They are New Haven, Bridgeport, Waterbury, Hartford, Meriden, and New Britain, and rank in the order named. Their combined population in 1900 was 355,000, or 39 per cent. of the population of the State. They employed, however, 47.6 per cent. of the wage-workers engaged in manufactures. And these workers, 47.6 per cent. in number, received 50.6 per cent. of the total wages paid to workers in the manufacturing plants in the State. That accounts for the prosperous condition of the wage-workers in the larger cities of Connecticut.

New Haven leads all the cities in manufacture. It made nearly one-half of the ammunition produced in the State. Indeed, the making of ammunition and fire-arms is its leading industry; but it also makes hardware, rubber goods, clocks, corsets, and carriages and wagons on a large scale. Bridgeport follows close upon New Haven in the extent of its output. Brass-casting and brass-finishing and the making of corsets, ammunition, and sewing-machines are its chief industries. Waterbury, the third in rank in output, is the great brass-manufacturing centre of the United States. Out of its total output in manufactures, brass-ware products constitute one-quarter. Hartford, the great insurance centre of the country, has for its chief industries the making of bicycles and automobiles, but the diversified list of manufactures of the city includes lamps, clocks, brass and copper, needles and pins, hardware, hosiery and knit goods. Meriden, the fifth in rank of the cities, makes 43 per cent. of the plated and britannia ware of the State, and, of course, that is its great industry. It also makes hardware and gas and lamp fixtures on an extensive scale. New Britain, sixth in rank, is the great hardware centre of the State and country, but it has other industries, such as cutlery, knit goods, and stamped ware.

Ansonia is also a noted city in the manufacturing line. It has fewer wage-earners than New Britain or Meriden, but its product in manufactures exceeds that of either city by 40 per cent. Its products are largely brass, and this accounts for the valuable output. Ansonia, Derby, and Shelton are practically one city,

equalling the total population of Meriden and New Britain, but the three cities make more goods than the two larger cities combined. Torrington is another city given up largely to the brass industry. Naugatuck is the leading seat of the rubber industry. Over in Norwich and its tributary country in the eastern part of the State is the great cotton-goods industry. Manchester, close to Hartford, excels in the great silk industry. This industry also thrives in New London, Bridgeport, and Tolland, and is to be found in the hills and valleys of Tolland and Windham counties. Wallingford has for its chief industry plated ware. Norwalk and Danbury are the great centres for making hats. Stamford excels in the far-famed lock industry of the State. Bristol makes hosiery and knit goods especially; Windham makes thread, and Stonington makes cotton, worsted, and silk goods. Winchester and Winsted lead in the great clock industry of the State. Hardware, hosiery, and silk goods are also produced there. Thompsonville has a great carpet industry, and Hazardville's powder industry is famous.

Six of the eight counties of the State show an increase in the output of industries in the decade from 1890 to 1900. Litchfield has an increase of 78 per cent.; Hartford, 59 per cent.; New Haven, 55 per cent.; Fairfield, 37 per cent.; New London, 25 per cent.; Middlesex, 8 per cent. Tolland's industries fell off 16 per cent. in the decade, and Windham's decreased by 14 per cent. These decreases are due to the falling off in the prices of textile goods, made largely in those counties, and also to the fact that many of the smaller establishments have been consolidated with larger concerns in the cities. To one who is interested in digging out the meaning of figures tabulated in statistics, probably no more profitable study could be found than to take the long lists of goods made in each of the great centres of Connecticut industry and see their significance in relation to the prosperity of the wage-workers and the community at large.

There are those who preach constantly the doctrine that the wage-earners of this country are down-trodden, slaves to an evil industrial system, and that their condition is little better than that of squalor. Connecticut is pre-eminently a place in which to test that theory. I have already shown what proportion of the output of the State's industry the wage-earners receive—about forty per cent. The actual physical state of the workers probably will best reveal the truth as to their condition in life. Go to any Connecticut town when the mills send out their operatives after the day's work is ended. The men and women are not lean and hungry-looking. They are well dressed. They are cheerful, and laughter and merrymaking may be heard as they go from work. Their homes, too, are filled with comforts, and often luxuries. Their situation in life seems to give the lie to the croakers who

bemoan the sad condition of all those who toil in mills. Intelligence abounds, and the condition of savings-banks' deposits, always increasing, shows that there is much thrift in the State, and that dire poverty, or even poverty as it is understood commonly in this country, is absent.

The wage-workers of Connecticut are really prosperous and contented. That is what makes the commonwealth the highly developed community it is. That is what gives it its rank in the chain of States. Given up, as it is, almost wholly to manufacturing, if it were true that wage-earners are down-trodden and slaves of the money power, Connecticut would be the most miserable State in the country. The condition of its people shows that all these assertions of demagogues are not true.

Take a sample mill community of Connecticut and see what the actual condition of the operatives is. There is the silk industry of the Cheneys at South Manchester, near Hartford. These mills employ as many as 2500 persons, and the number of homes occupied by the operatives equals nearly 1000. The place is like a park in some respects. How do the working-people fare? Read what the *Hartford Courant* said of South Manchester on July 13, 1895:

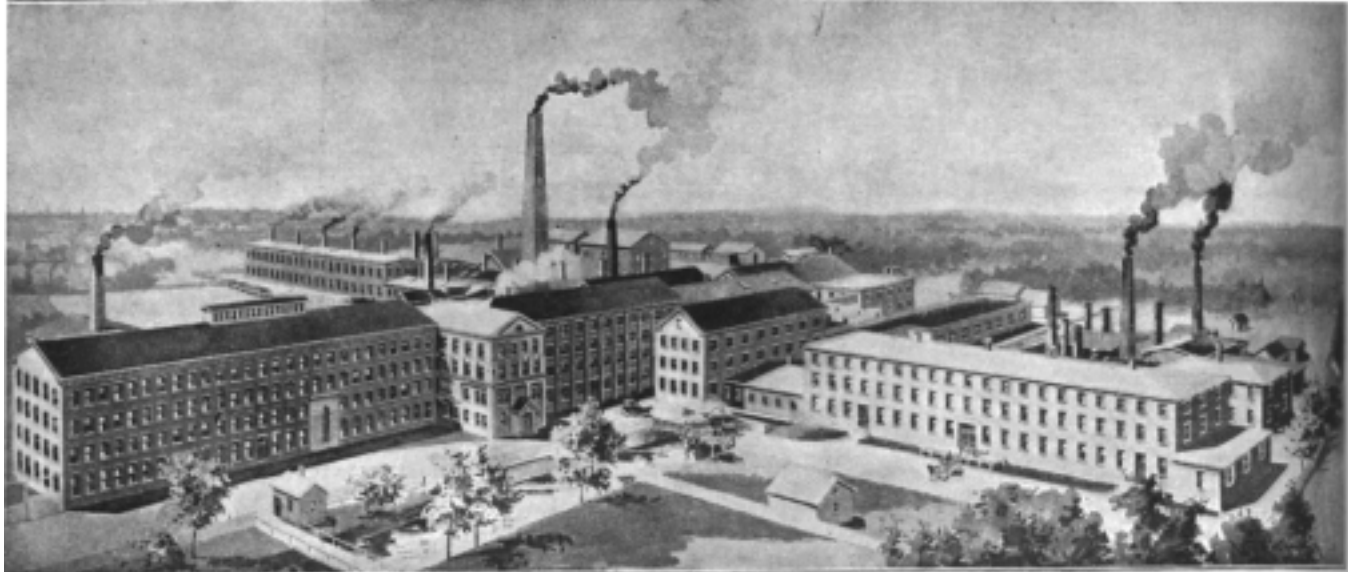
When the machinery stops and the mill doors open, and the hundreds of men, women, and children pour out, you do not see a lot of plucked forms and tired faces, but a crowd of healthy, cheerful-looking people who have homes that they enjoy. Some of the employees, living at a distance, ride home when work is over, and foreign visitors at South Manchester, accustomed to see the narrow and impoverished living of mill-hands abroad, cannot restrain their astonishment at the operatives "riding home from work in their own carriages." The supervision exercised by the management over the homes and the outside living of the employees, so far as it goes, is simply to promote the general welfare. The managers encourage the operatives to buy and own homes, and they sell these reasonably, with no condition except that liquor shall not be sold on the premises nor nuisances maintained. This really adds to the value of each purchase, since it guarantees the neighborhood. The homes are mainly single houses with gardens attached. Each is light and

roomy, and all are kept neat and tidy. A look at these gives its own suggestion of cleanliness and thrift.

I do not know a more satisfactory picture than that. When you consider the school system of a place there comes another test. The schools at South Manchester rank as high as any in the State, and Connecticut's schools are among the best in the country. The Cheneys have put

Although the matter of insurance is not part of a State's manufacturing development, it is closely allied to the making of things in Connecticut, and a paragraph devoted to it in this chapter will not be improper. It is due largely to the accumulation of capital through fire and life insurance and its investment in the State that Connecticut has become a thriving community. Fire-insurance started

terests are so vigorous that there is no need to go into details concerning them. The city simply leads in this great business established by Connecticut sagacity.



Factory of R. Wallace & Sons, Wallingford, Connecticut

up at their own expense a large school, where the ordinary branches are not only taught, but where instruction is given in kindergarten work, in manual trades, and in cooking, and where a gymnasium training is required. It is one of the finest educational plants in the country. Where the wage-workers of a State are intelligent it is safe to say that no system of industrial slavery can long exist. Connecticut is a perpetual object-lesson as to the nobility of labor and the high development in citizenship of the American working-man. Perhaps that is its chief glory.

late in the eighteenth century in Hartford, the exact date not being known. It had its ups and downs. Although the great fire in New York in the late thirties nearly swamped the business, and did ruin it in many other places, it really strengthened Hartford, for Hartford paid its losses. Life-insurance started up early in the forties, and Dr. Philips, the inventor of the famous "tomato pills," that were to give so much health to those who took them, had a large share in it. Accident, marine, and steam-boiler insurance also began in Hartford. To-day all these in-