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\title{
THE AUTOMOBILE INDUSTRY IN CANADA
}

1922

Prepared in the
MINING METALLURGICAL AND CHEMICAI. BRANCH

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Minister of Trade and Commerce
\(+++\)

OTTAWA

\section*{ITST OF PUTI二CATIONS}

Prepared in the
NINING, NFTALIURGICAL AND CHEGICAI, BZANOL
DOITINION DUREAU OF STATI STTCS
(1) IINSEAI PBODUCTION (Jining and hetallurgy)

Gencrel Rejo
(a) Anmual Report on the lif noral Production of Cannde.
(b) Preliminary Reports (semi-innuil) on the Difneral Production of Canada.

Con1:-
(a) Arnual Report on Conl Stetistics for Cenade.
(b) Monthly Report on Corl. Statistics for Cenade.

In addition to the forergoing reports on minerel production a scries of anmunl bulletins is in preparation eech of which will contain statistics relative to a particular metal or non-metalile mineral or to a special section of the mineral indurtry, and the Beries when complete will cover every phase of mineral production in Canade. (2) STATISTICS OF MAFUEACTURES

Annual summary reports on the sections of manufactures covered by the Mining, Metrllurgical and Chemical Bronch are issued as follows:
1. Iron and its Products.
2. Manufectures of Non-Fer:ous Metnls.
3. Nipnufactures of Non-lictallic Minerals.
4. Chomicels and Allied Producos.

In addition to the forcroing printed summary reports, s series of bulletins is being prepared, eech number nf which denls with a particular phase of manufecturcs. These latter reports contnin all the available statistics on the subject reviewed.

A monthly report on the Production of Iron and Ster? in
Canade is also published.
Copies of the available publications may be had upon recuest.

\title{
minion 䫏ureau of gratzite, Canada
}
R. H. COATC. B. A., F.S.S. -. DOMINION STATISTICIAN
S. 1. COOK. B. A., A. I. C. . CHIEF OF THE

MINLNG, METALLURGICAL AND CHEMICAL BRANCH

\section*{THI AUTOMBITR INDUSTRY IN CANADA IN \(192 \%\)}

Whe number of automobiles manufictured in Canndo during 1922 excesded all previous records and reacked a total of 201,007 or \(7 \%\) more then the maximum production of former years attaned in 1920 and \(53 \%\) more then the outout in 1921. The totil value of the output was \$81,956,429 or \(\$ 14,906,220\) grenter than i:n the preceding yeir, although 319,509, 117 Iower than the correspendine figures for 1920. The advances were aspecially marked in the vajious sizes of closed cirs. The output of coupes incrensed from 3,276 in 1920 to 5,367 in 1922 and of sedans from 4,681 to 10,431 . The number of runnonuts nlso incrensed from 3,759 in 1920 to 4,700 in 1922. The production of touring cars vas 5?.536 or 8,723 less then in 1920, but 13,786 greater tha1 in 1921. The output of trucks followed a similar trend sjnce 10,174 were manufnctured in 1920; 5,148 in 1921, and 8,159 in 1922.

The lergely incresscd production wes reflected in the employment records, the number of wage-earners omjloyed rising from n montily average of 4,429 in the provious yes. to \(6,043=n\) lyn2. A ripid development was effected during the finst ijve monthis as the pia-rolls crrried 3,025 numes in December, 1921, and 6,935 in Nay, 1922. A decline in trend was recorded for the remainder of the yerr, the minimum for the last half of the year occurring in October when 5,550 were employed. In November and December employment recovered somewhnt and 6,088 hands were engaged at the end of the year.

An historical summary showing the development of the automebile manufacturing incustry is presented in Toble 1.

TAILE 1, -HI STORICAL SURATARY OT THS AUMOMOTIEE MANUFACTURTIGG INDUSTRY
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Year & \[
\begin{gathered}
\text { No. } \\
\text { of } \\
\text { plant }
\end{gathered}
\] & Capital & \[
\begin{aligned}
& \text { Yocis } \\
& \text { Eivioy } \\
& \text { 203 }
\end{aligned}
\] & \[
\begin{aligned}
& \text { Balinjes } \\
& \text { and Wiges } \\
& \text { pad }
\end{aligned}
\] & \[
\left\{\begin{array}{l}
\text { Cost of } \\
\text { liaterinils }
\end{array}\right.
\] & Value of products \\
\hline 1917 & 11 & 28,192,858 & 5,919 & C,2339,472 & 35,525,820 & 54,466,273 \\
\hline 1918 & 10 & \(31,550,303\) & 5.362 & \(6,855,383\) & \(37,053,545\) & 66,814,265 \\
\hline 1919 & 11 & \(34,949,130\) & , \({ }_{\text {crab }}\) & , 712, 780 & \(51,640,775\) & 80:619,8.46 \\
\hline 1920 & 17 & 53,906, 5nd & 3.281 & 13.33,.034 & \(67,757,0 \times 5\) & 101,4055,846 \\
\hline 1921 & 14 & \(40,080,2\}\) & 5.475 & 7, 337,514 & \(45,11,345\) & 67,050,209 \\
\hline 1922 & 15 & 47,761,964 & 7,:34 & 11,273,6431 & 54,403,719 & 81.956,429 \\
\hline
\end{tabular}

Cars Withdrawn from Use: An attempt to cistimave the number withdra*n from use during 2.921 and
presertel in Fable 2. In estimating for 1922 the sum of the registra cons ard sxports in 1922 were deaucted from the sum of the registracions" in 1921 and the production and imports during 1922. The cars to b: counted for were 565.359 in number ard the registrations and expoets in 1922 were 543.534 cars leaving a statistical balance of 24,825 for


\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{} & \multicolumn{2}{|l|}{1221} & \multicolumn{2}{|r|}{1922} \\
\hline & Year & iro. & Year & Tis. \\
\hline Cars to be accounted for: & & & & \\
\hline Automobile licenses. & 1920 & 396.913 & 1921 & 455,761 \\
\hline Manufactured. & 1921 & \(66,2.6\)
7,2 & \(\begin{array}{r}1922 \\ -922 \\ \hline\end{array}\) & \[
\begin{array}{r}
101,007 \\
11,591
\end{array}
\] \\
\hline TOTA & & \(470,+29\) & & 568,359 \\
\hline Cars accounted for: & & & & \\
\hline Avtomohile license Exported. & 1921 & 455,761
10,726 & \(\begin{array}{r}1922 \\ 1922 \\ \hline\end{array}\) & \(505.308(\mathrm{a})\) \\
\hline Exportes. Re-exported.. & 1221 & \(\begin{array}{r}10.726 \\ \hline\end{array}\) & \(\begin{array}{r}1922 \\ 1922 \\ \hline\end{array}\) & \\
\hline TOTIL. & & 266,761 & & 543,534 \\
\hline Cars withdrewn from use & 1921 & 3,688 & 1922 & 24.825 \\
\hline
\end{tabular}
(a)-Subject to Revision.
phssenger Cars: The production of passenger cars in Canada during 192 ? was 79,094 in addition to 13.744 chassis which were listed among the products of the firms engaged in the manufacture of automobiles. The output in 1921 was 57,401 cars and 3,697 chassis. Ihe value of the output also increased in the latter year but no' in the same proportion. The number increased by 58,10 , while the totul ralue advanced by \(16 \%\) only.

The i:morts in 1922 wero 10,705 cars having an averace volue of \(\$ 1,076\) as comnered with an export trade of 35,394 cars with an averace valuation of \(3555^{\circ}\). The registrations of passenger cars in 1922 were about 462,275 , an increase of \(9.2 \%\) over the previous year.

The average selling value at the factory of the 79,094 passengex cars manufactured or assembied during 1922 in ire seven producing plants was 3764 , or 15.7 , icss than the corresponding average of \(\$ 906\) for the output \(0=57,401\) cars in the previous year.
ir prices was generai throughout the \(3 i x\) classes of age: cars, but the assigned value of the chassis advnnced slightyy.

Irvick: The total production of truck:s in cannda incrensed \(59 \%\) or from 5,148 in 1921 to 8,169 in 1922. The number of truck:s urder one ton crpacity increased from 467 only to 915 ; trucks from one ton to under 5 tons in cepecjty from 4,676 in number to 7,243 or \(55 \%\). As compered wheth the record of 1920, the output in 9922 of the heavier trucks was slightly less. Imports of freight automohiles decreased from 991 in 1921 to 886 in 1922, while the exponts of trucks manufactured in Canada advanced from 1,421 to 2,564. The e-exports declined fram 24 cars to 5 in the some period. The number 0 trucks made nvalable for sale in Canada was therefore 4,654 in 1921 and 8,255 in 1922, an increase of \(77 \%\).

The average assigned value of the trucks manufactured in Conade declined from \(\$ 747\) in 1921 to \(\$ 641\) in 1922. The trucks wi th a crpncity of less than five tons declined in value while the few of hervier capacity advanced slightly. The date regerding values are given in Table 8.
Automobile Engines: The number of engines made during 1922 in rutomobile manufncturing plants for assemblirg into cnrs was 52,311 a, compred with a production of 44,621 in the prorious yenr. The horsepower capacjty also increased from 997,242 to \(1,168,204\), the average horscpower per engine being practically maintained. The entire output in the year under review were 4-cylinder heving capacity of less than 25 horsepower.

The imports in 1922 were 22,260 and if this number is deducted from the 48,901 given as the purchased engines used in the quiomobile manufacturing plants a remainder of \(26,6 \mathrm{ll}\) is obtained as an approximate estimate of the automobile engines manufnctured in nutomobile accessory, and other plants in Canade. An anelysis of the manufnctured and purchased engines is giver in mables 11 and 22 and the imports for several years are presented in Table 15.
Automabile parts The growing importance of the trade in putomobile and Accesscries
parts needs no special emphasis. The imports during 1922 were valued at \(\$ 13,744,496\), the greater part of which were used for assembling into cers, The production in the industry under review incrensed from a valle of \(\$ 5,149,503\) in 1921 to \(\$ 9,428,600\) in 1922.
 MOBILE ENGINES, AHD THE INTMBM GF AUTOMOBILES MADE II CANADA,
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Year} & \multirow[t]{2}{*}{\[
\begin{aligned}
& \text { Entines } \\
& \text { Imported } \\
& \text { into } \\
& \text { Canada }
\end{aligned}
\]} & \multicolumn{3}{|l|}{As reported by Autorobile janu acturss} \\
\hline & & Engines & Engines Purchased & Automobiles Produced \\
\hline 1920 & 30.526 & 59.025 & 39,620 & 94,144 \\
\hline 1921 & 9.939 & 47,621 & 21,074 & 66,246 \\
\hline 1922 & 22,260 & 52,311 & 48.901 & 101, 207 \\
\hline
\end{tabular}

TABIE 4. COST OF MATEETALS UGED I\% THE AUTOMOBITE MANUFACTURING IU-
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{} & \multirow[b]{2}{*}{urit} & \multicolumn{4}{|l|}{\(=\frac{122}{}\)} \\
\hline & & Quantity & \[
\left\{\begin{array}{c}
\text { Cost at } \\
\text { Plant }
\end{array}\right.
\] & Quantity & \[
\begin{aligned}
& \text { Cost at } \\
& \text { Flant } \\
& \hline
\end{aligned}
\] \\
\hline Ra\% materials: & & & & & \\
\hline Steel. & Tons & 6,219 & 353,+38 & 16:849 & 1,512.653 \\
\hline Iron. & & 2,554 & 382,037 & 2,990 & , 371,856 \\
\hline Copper & " & & 31,990 & 190 & 68,451 \\
\hline Aluminum. & Lb. & \(\begin{array}{r}\text { 3 } \\ 38 \\ \hline\end{array}\) & 227.731 & -2,057 & 43,516 \\
\hline Iron castings & Tons & ,893 & 856,253 & , & 293,018 \\
\hline Other metal castings & & & 320,510 & . 760 & 528,560 \\
\hline Steel castings.......
Tubes
and pipings.. & Tons & 4.860 & 972.793 & 217 & . 207.735 \\
\hline Tubes and pipings... & & & 450,217
415,315 & 131 & \\
\hline Other metais........ & & 78,000 & +15, & 779,824 & \\
\hline Glass & Sq.Ft & & , 028 & 20,100 & \\
\hline Lumber, all kinds... & Sq.Ft. & 14,682 & 425,332 & 14,281 & 949,888 \\
\hline Leather and other upholstering mater- & & & & & \\
\hline ials.......... & & & 1,228,814 & & 1,105,008 \\
\hline Paints and varnishes & Gal. & & 139,140
6,500 & 112,+42 & \[
\begin{aligned}
& 263,076 \\
& 208,000
\end{aligned}
\] \\
\hline \multicolumn{6}{|l|}{\multirow[t]{2}{*}{Finished parts and accessories:}} \\
\hline & No. & & & & \\
\hline Budies................. & No. & 57.386 & 7,891,087 & 45,890
83,421 & 7,946,014. \\
\hline Tops.. & INO. & 48,337 & 1,508,094 & 61,072 & ,62,019 \\
\hline Encines. & No. & 21,074 & 5,201,070 & 46,562 & 3,139,066 \\
\hline Sprines & No. & 160,429 & 678,302 & 256,252 & \\
\hline Wheels..... & No. & 226,253 & 1,840,310 & 300,929 & 953 \\
\hline \multicolumn{6}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{c|c|c|c|c|c}
\begin{tabular}{c} 
Sped ometer and othe \\
instrument board
\end{tabular} & \(\cdots\) & \(\cdots\) & 108,925 & \(\cdots\) & \(1,02,152\)
\end{tabular}}} \\
\hline & & & & & \\
\hline equipment........... & \(\ldots\) & & 252,330 & & 410,923 \\
\hline Body and chassis & & & & & \\
\hline  & No & 62,702 & 391,455 & 93.172 & \[
\begin{aligned}
& 1.772 .742 \\
& 948.615
\end{aligned}
\] \\
\hline Generators & No. & 5, 5 ,106 & 79:502 & 93.762 & 91,286 \\
\hline Magnetos. & No. & ,150 & 6,369 & 5,766 & 42,065 \\
\hline Startine motors & No. & , 863 & 67.434 & 6,636 & 81,991 \\
\hline carburejors & No. & 8,096 & 150,324 & 79,318 & 175,521 \\
\hline Radzators. & No. & & 526. 12 & & 521. \({ }^{4} 65\) \\
\hline Colls & No. & 1977,357 & \[
\begin{aligned}
& 526,1,42 \\
& 361.501
\end{aligned}
\] & 205,960 & \[
\begin{aligned}
& 392.565 \\
& 518.155
\end{aligned}
\] \\
\hline Tires, preumatic cas- & & & & & \\
\hline minges, oneumatic tubes & No. & & & & \\
\hline Tires, pheumatic tubes & No. & \[
\begin{array}{r}
211,544 \\
2,054
\end{array}
\] & \[
\begin{array}{r}
1,750,358 \\
52,239
\end{array}
\] & \[
\begin{array}{r}
488,925 \\
2,760
\end{array}
\] & \[
\begin{array}{r}
4,576,245 \\
54,207
\end{array}
\] \\
\hline Jacks, pumps, wrenches & & & & & \\
\hline and other tools.... & & & 280,102 & & 6,386 \\
\hline Other finished parts and accessories.... & & & 8,872,169 & & 2,725,772 \\
\hline All other materials. & . & & 1,426,44.3 & & \\
\hline TOTAL... & & & 5,119,345 & & 54,408,719 \\
\hline
\end{tabular}



TABLE 7. VALUE OF AUTMOBILES PRODUCD I CATADA FROM 19?2-1922.
\begin{tabular}{|c|c|c|c|c|c|}
\hline & 1920 & 1921 & 1922 & \[
\begin{aligned}
& 6 \text { of } \\
& \text { h221- } \\
& 6920
\end{aligned}
\] & \[
\left[\begin{array}{l}
\text { of } \\
1922- \\
1921
\end{array}\right.
\] \\
\hline Automobiles, passenter & & & & & \\
\hline open: & & & & & \\
\hline .... & \(59.270,310\) & \(2,750,305\)
\(35,925,833\) & 3,056,941 & \[
\begin{aligned}
& 84 \\
& 60
\end{aligned}
\] & 1110 \\
\hline 7 passenger......... & 5,653,55: & 1,231,251 & 2,244,837 & & 116 \\
\hline 2 to 3 passenger & 762,151 & 3,+66,744 & 801.190 & & \\
\hline \begin{tabular}{l}
4 to 5 passenger.... \\
passoncer.
\end{tabular} & 644,40 & 7,460,931 & 11,460,008 & 113 & \[
133
\] \\
\hline Suk-totai........ & , 075, mid & & & & \\
\hline automobiles comnercial & & & & & \\
\hline Under 1 ton capacity. & 535.732 & 468,082 & 617.757 & 67 & 132 \\
\hline 1 ton but under & ?.491.471 & 3,345,206 & 533,04 & 44 & 136 \\
\hline 5 tons and over.. & & & & 44 & 136 \\
\hline sub-total.... & & & & & \\
\hline atomobile chassis. & & 2,556, <24 & 0.102 .35 & 65 & 432 \\
\hline \begin{tabular}{l}
utomotiles, special \\
imount received for
\end{tabular} & 220 & & & & \\
\hline wastom and repair & & & & & \\
\hline \begin{tabular}{l}
work. \\
\(1]\) other products
\end{tabular} & \[
54: 050
\] & \[
4,496,003
\]
\[
5.102 .503
\] & \[
68,770
\] & \(\ldots\) & \\
\hline total value. & 101,465,846 & 67.050,209 & 81,956,429 & & \\
\hline & & 67,050.209 & & 66 & 122 \\
\hline
\end{tabular}

TABIE 8. AVERAGE ASSIGIND VAIURS TOR CANS MavURACTURED Ii Th


TABLE 9. PRODUCTION OF AUTOMOBILES IN CATHADA, CLASSIFIED BY TYPES OF CARS AND ENGIIESS, 1922.


TABIE 10. PRODUCTION OF THE AUTOMOBILE MANUFACTURING PLANTS BY PROVFICES, 1922.
\begin{tabular}{|c|c|c|c|c|}
\hline Products & Quarti & valus & 0uantity & \[
\frac{\text { Io }}{\text { value }}
\] \\
\hline Automobile, passenger: & & & & \\
\hline Open: 3 passene & & & & \\
\hline \({ }_{4}\) to 5 passenger & \(=\) & - & 57.151 & 39:458,641 \\
\hline 7 passenger. & - & - & 1,445 & 2,244,837 \\
\hline Closed:
2 to
to passenger & & & & \\
\hline 7 passenger.... & - & - & & \[
\begin{array}{r}
440,647 \\
462,647
\end{array}
\] \\
\hline Automobile, comraercial: & & & & \\
\hline & & 102,057 & \[
\begin{array}{r}
915 \\
7,217
\end{array}
\] & \[
\begin{aligned}
& 617,797 \\
& 430,992
\end{aligned}
\] \\
\hline \(\frac{1}{5}\) tons and over......... & - 6 & 50,526 & & \[
31,033
\] \\
\hline Automobile chass is. & - & & ,? & 6.762,390 \\
\hline Amount received for custom and repair work & - & 9,858 & & 58.912 \\
\hline All other products in- & & & & \\
\hline cluding parts. & - & 920 & - & 2, 427,680 \\
\hline IOTA & 32 & 163,361 & 100,975 & 81,793,068 \\
\hline
\end{tabular}

TABLT 11. TYPE AND HORSEPOTER OF ALI ENGINSS MANUFACTURED IN AUTUMOTII MANTUFACTUPING PIANIS, 1920 to 1922.
\begin{tabular}{|c|c|c|c|c|}
\hline & Year & Number & \[
\begin{aligned}
& \text { Potal } \\
& \text { Horsepower }
\end{aligned}
\] & \[
\begin{aligned}
& \text { Averase } \\
& \text { Horsepower }
\end{aligned}
\] \\
\hline Type of Engine:- & & & & \\
\hline 4 cylinders. & 1920 & 54,121 & 1,192,610 & 22.02 \\
\hline & 1921 & 44.614 & 1,997,242 & 22.4 \\
\hline 6 cylinde & 1922 & 52,311
4,904 & 1,168,204 & 22.3 \\
\hline & \begin{tabular}{l}
1920 \\
1921 \\
\hline 1929
\end{tabular} & \(\begin{array}{r}4,904 \\ \hline 7\end{array}\) & \[
\begin{array}{r}
266,000 \\
189
\end{array}
\] & \[
\begin{aligned}
& 54.24 \\
& 27
\end{aligned}
\] \\
\hline IOTALS. & \(\underline{1920}\) & & & \\
\hline & 1921 & 44,621 & -997,431 & \(\ldots\) \\
\hline & 1922 & 52,311 & 1,168,204 & .... \\
\hline Engine Power: - & & & & \\
\hline Under 25 horse-power & 1920 & 54,121 & 1,192,610 & 22.02 \\
\hline & 1921 & 44,591 & 996,231 & 22.3 \\
\hline 25 H.3. but under 40 & & & & \\
\hline 1.P................ & 1920
1921 & \[
\begin{array}{r}
226 \\
20
\end{array}
\] & \[
\begin{array}{r}
9,000 \\
700
\end{array}
\] & \[
\begin{aligned}
& 39.82 \\
& 35
\end{aligned}
\] \\
\hline & 1922 & & & \\
\hline 40 H.P. and over & 1920 & \[
\begin{array}{r}
4,678 \\
10
\end{array}
\] & \[
\begin{array}{r}
257,000 \\
500
\end{array}
\] & \[
\begin{aligned}
& 54.09 \\
& 50
\end{aligned}
\] \\
\hline TOTAL & & & & \\
\hline & 1921 & 44,621 & 997,431 & \(\ldots\) \\
\hline
\end{tabular}

TARIE 12. TYRE AID HOASE-ROWER OF ALI RTMGMLSED ENGINES USED IN AUTOMOBIEF JAHUFACIUAING PIANTS IN 1922.


TABLE 13. NUNTPER OF MOTOR VEHICLSS REGISTERED IN CANADA BY PROVINCFS 1919-1922.
\begin{tabular}{|c|c|c|c|c|}
\hline Provinces & 1919 & 1920 & 1921 & 1922 \\
\hline \begin{tabular}{l}
Frince Faward Ioland liova Scotia. \\
Ne:t Brunswick quebec.. \\
Cntaric. \\
Manitoba. \\
saskatchewan. \\
Alberta... \\
British Columbia. \\
Yukon Territory.
\end{tabular} & \[
\begin{array}{r}
967 \\
10,210 \\
8,306 \\
33,77 \\
144,804 \\
30,118 \\
55,855 \\
34,000 \\
22,420 \\
\hline
\end{array}
\] & \[
\begin{array}{r}
1,419 \\
12,450 \\
11,196 \\
41,502 \\
177,21 \\
36,455 \\
60,325 \\
38,015 \\
28,000 \\
81 \\
\hline
\end{array}
\] & \[
\begin{array}{r}
1,751 \\
14,205 \\
13,515 \\
54,670 \\
206,521 \\
40,215 \\
61,184 \\
40,235 \\
32,990 \\
82 \\
\hline
\end{array}
\] & \[
\begin{array}{r}
2,167 \\
16,159 \\
13,611 \\
61,995 \\
241,986 \\
42,200 \\
61,367 \\
40,642 \\
33,880 \\
\hline 85 \\
\hline
\end{array}
\] \\
\hline TOTAI FOR CANADA...... & 341,316 & 407,060 & 465.378 & 514,092 \\
\hline
\end{tabular}

TABIE 14 , PEGISTRATIOITS OY WOIOR VEHICIFRS TH CATA, DA. DURING 1.0 .2 .2.


TABLT 15, IMFORTS INIO CANADA AND EXPORTS, OF AJTONOBITRE ATDMPARTE IN \(1919,1920,1921\) and 192?.

\section*{I TEMS}

AMPORS


Afparent Eale: Deductine the exports from the sum of the production and imports the number of cars made arailable for sale in Sanada suring 1922 was 76,141, an increase of 13,605 or \(22 \%\) over the previous year. The exports were 38,225 cars as contrasted with imports 21 11,591. A notewortiny increase occurred in the exports of passenger gars of domestic manufacture, there beine 35.394 cars exported as compared with 9:305 in 1921. Tabie 16 gives a resune of the apparent effective demand in canada, comparatively for the past two years.
 \(12 \varepsilon 1\) a \(12 \div\)


Fmpl Oyment:
Another measure of the increase of activity in the automobile industry sincc 1219 is found in the average number of Wage earners which increased from 5,839 in 2919 to \(6,0 \% 3\) in 1922 or 3.5\%. The increase in production during the same period standing at \(15 \%\) as indicated by the number of cars manufactured, considerably outstripped the advance in employment. The folloning table illustrates fluctuntion in this regard, -
\begin{tabular}{|c|c|c|c|c|}
\hline & 1319 & 1920 & -1921 & 192. \\
\hline Production of cars. & 87.835 & 94, 144 & 65,246 & 101,007 \\
\hline Arorare nuaber of wage. & 100 & 107 & 75 & 115 \\
\hline fidex with record of 1929 as & 5.837 & 7.192 & \(4,4 \div 9\) & 6,044 \\
\hline bare. & 100 & 123 & 76 & 103.5 \\
\hline
\end{tabular}

Referring to taine 18, it will be observed that in 1922, 7,381 emplorees were engaged of whom \(1,3.11\) were on salaries and the rumaining 6,043 were ware earners. The salaries were \(32,810,397\) and the wapes were \(\$ 8,463,246\) making a total amount of \(\$ 11,273,643\). The a"erage day was 8.9 hours and the week consisted of 49.6 hours. Or the average each plant operated full time 245.2 days, worked part Sinie 34 days, and was idle 25 days. For purposes of uniformity, tine year was regariod as consisting ol 3 cq working days.
-10-
TABLE 27. WORKING TINE AHD DATS IN OTTRATIUK IM TYE AUTOMORILE INDUSRY II. CNTM1, 1020-1022.

\# In the 1921 returns, the days in operatiori were not separated as to full time and part time.

TABLE 18. NUOBER OT MKPLOVTSS AND SALARIPS ANT WAGES FAID IN THE



\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{} & \multicolumn{3}{|c|}{\(1-\frac{1}{2}\)} & \multicolumn{3}{|c|}{22} \\
\hline & \multicolumn{3}{|l|}{- lamer un mas earners} & \multicolumn{3}{|l|}{Nuinter of wafe eorne} \\
\hline & 1 ml & emals & 10tid & Incie & Femate & Total \\
\hline Jaruarv. & 4,192 & 106 & 4,298 & 4,689 & 199 & \(\therefore 8888\) \\
\hline petruary. & 4,435 & 1.18 & 4,553 & 5.493 & 211 & 5.704 \\
\hline Itrich. & 5,070 & 171 & 5,211 & 6,119 & 236 & 6, 355 \\
\hline April. & 5,735 & 192 & 5.98 ? & 6.532 & 216 & 6,778 \\
\hline Tay. & 5,055 & 190 & 5,245 & 6,684 & 255 & 6.839 \\
\hline June. & 5,152 & 139 & 5,291 & 6,625 & 237 & 6,862 \\
\hline July. & 4,198 & 107 & 4,305 & 5.072 & 179 & 6,051 \\
\hline Aucust. & 4,24? & 117 & 4,354 & 5,006 & 183 & 5.789 \\
\hline September & 4,259 & 126 & 4,335 & 5,614 & 202 & 5816 \\
\hline October.. & 2,954 & 115 & 3,069 & 5.,336 & 214 & 5,550 \\
\hline November & \[
\begin{aligned}
& 5,504 \\
& 3,51
\end{aligned}
\] & \[
122
\] & 62: & 3, \({ }^{2}\) & \[
225
\] & \\
\hline December & \[
2.867
\] & 158 & 025 & & 213 & \[
88
\] \\
\hline AVERAGE. & 4,311 & 133 & 4,449 & 5.826 & 217 & 6,043 \\
\hline
\end{tabular}

TABLE 20. PONIRR ENPDCYED IN THE AJTCLIOBILE MANUFACTURING INDUSTRY IN CAIA2. 192?.
\begin{tabular}{|c|c|c|}
\hline Description & No. of Uniちs & Rated Horsenomer \\
\hline \begin{tabular}{l}
1. Stati nary engines, including those used for hoisting, pumping, ete:- \\
(a) Steam ongines and turbines.......... \\
(b) Gas engines. \\
2. Electric moturse- \\
(a) Operated by power generated ioy the establ ishment. \\
(b) operated by purchised power.........
\end{tabular} & \[
\begin{array}{r}
15 \\
6 \\
\\
518 \\
473 \\
\hline
\end{array}
\] & \[
\begin{aligned}
& 5,855 \\
& 4,484 \\
& 7,891 \\
& 1,847
\end{aligned}
\] \\
\hline Iotal power instaliation.. & 1,01? & 20,077 \\
\hline Boilers instalied. & 38 & 6,119 \\
\hline
\end{tabular}

TABLE 21. FUEI CONSURED IN THE AUTOIGZIIE MANUPACTURING INDUSTRY IN CANAT 1. 192?.

-12-
Qingmoth gtatistics: The current asscts conprisine cash, trading and operating accounts and bills receivalits to the amount of \(326,627,570\) constituted \(56 \%\) of the total capita? entloyed. The turnover, being the ratio of the value of the output \(t \cdot\) the current assets, was \(31 \%\). The cost of materials representod \(66.4 y^{2}\) the welling value of the output; salary and wage paynents amounted to \(23.7 \%\). The ratio of the total manufacturing exrenditure to the ralue on the product, or the operiting ratav, was \(38.6 \%\).
 CAMADA FFOM 1591 to 1922.
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{TEAT} & \multicolumn{4}{|c|}{Capital rewresented by} & \\
\hline & \[
\begin{aligned}
& \text { Iands, uild } \\
& \text { ings ind }
\end{aligned}
\] & Machinery and tools & Materials on hand, stocks in process.ets & ing and operatine Accounts & \[
\begin{aligned}
& \text { Total } \\
& \text { Canital } \\
& \text { Empioyed }
\end{aligned}
\] \\
\hline 1920 & 10,143,742 & 7.455,440 & 22,840.396 & 13,466,928 & 53.006.506 \\
\hline 1921 & 9,637,883 & 8,135,977 & 15.094.164 & 7,212,240 & \(40,080,269\) \\
\hline 1922 & 22,574,480 & 8.559 .964 & \(16,456,849\) & 10,170,671 & 47.761,964 \\
\hline
\end{tabular}

TABLE 23, FINANCIAL SUMAARY OF NTE AUMOMOBIIE TLUUP: GMURIUR IVBUGTRY
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