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Table listing various articles such as 'Am. Society of Mech. Eng.', 'Gold and silver', 'Asphalt beton', etc., with corresponding page numbers.

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THE MOTOCYCLE AWARD.

We learn from the Chicago Times-Herald that the judges made the following awards on December 5: Gold medal won by Morris & Salom. Points—safety, ease of control, absence of noise, vibration, heat, odor, cleanliness, and general excellence of design and workmanship.

The Morris & Salom "electrobat," which received the gold medal, is an electric carriage and was illustrated in the SCIENTIFIC AMERICAN for November 16, 1895. Only the Duryea and Benz-Mueller carriages went over the course. They are both propelled by gasoline. The Sturges machine is electrical, the Macy, Lewis, Haynes & Apperson, and the De la Vergne carriages are all run by gasoline.

Although the number of contestants in the race was small, still the contest has scientific value, on account of the elaborate tests to which the carriages were subjected, speed not being the only factor which was taken into consideration.

STRIKES IN THE UNITED STATES AND EUROPE.

We have before us the first number of the Bulletin of the Department of Labor, which is to be issued bimonthly in accordance with the law of March 2, 1895. In the preface the editor, Commissioner Carroll D. Wright, sets forth the aim and scope of this publication, as compared with the already existing Annual and Special Reports.

The first number, among other topics, deals statistically with the question of strikes and lockouts in the United States and in certain European countries. These statistics cover a period of thirteen and one-half years, from 1881 to 1894. During this time there occurred 14,390 strikes, involving 69,167 establishments, and throwing out of employment no less than 3,714,406 employes.

The greatest number of strikes, 18,787, occurred in New York State; then come Illinois, with 12,828, and Pennsylvania, with 10,661. Out of 69,167 establishments affected, about 90 per cent were in the following industries: Building trades, 26,860; coal and coke, 8,018; tobacco, 5,465; clothing, 4,769; food preparations, 3,817; metals, 3,454; transportation, 2,805; stone quarrying and cutting, 2,461; and five others in proportions under 1,000.

During these thirteen and one-half years, 32 per cent of the whole number of people thrown out of employment by strikes succeeded in gaining what they asked; 12.46 per cent only partly succeeded; and 55.50 failed altogether. From the table marked "Leading causes of strikes" we learn that 42.32 per cent struck for increase of wages; 19.48 per cent for reduction of hours; 7.77 against reduction of wages; 7.59 for increase of wages and reduction of hours; the remaining 22 per cent of the strikes occurring for minor and very varied causes.

The tables from which the above figures are taken are very startling, and they will come as a revelation to many. But the most sensational figures are those which deal with the actual losses incurred during these thirteen and one-half years of strikes and lockouts. The actual wage loss of employes was \$163,807,866. It cost the various labor organizations to assist the strikers \$10,914,406. The loss to employers was \$82,590,386. The corresponding losses due to lockouts were: Employes, \$26,685,516; assistance by labor organizations, \$2,524,298; employers, \$12,235,451. Summing up these figures, we find that the various

labor disputes of the past thirteen and one-half years have cost the country no less than \$298,757,923 1

Statistics may be dry reading; but they are often, as in this case, very eloquent.

It is pretty well understood, both by capital and labor, that strikes and lockouts are a crude and costly means for the adjustment of employer's profit and employe's wage—but just how costly can only be realized when we look at the appalling loss that is spelled out by the nine figures given above.

The statistics for Great Britain and Ireland cover the five years from 1889 to 1893 inclusive. Of the 4,526 strikes which occurred, 3,428 were reported in detail. They affected 1,852,193 persons. The successful strikes affected 44.5 per cent of this total number; the partially successful 32.9 per cent and the unsuccessful 20.7 per cent. These figures would seem to indicate either that labor is less under the control of capital or that its organization is stronger in those countries than it is in the United States.

In France during the years 1890 to 1894 there were 1,866 strikes, affecting 7,698 establishments and 500,475 employes. The average of successful strikes was 25.24 per cent; of partly successful, 29.26; and of failures, 44.64 per cent.

In Italy from 1878 to 1891 there were 1,075 strikes, affecting 254,668 employes. Of these, 24 per cent were successful; 47 per cent partly successful, and 29 per cent failed.

In Austria, during the year 1891 there were 104 strikes, affecting 1,916 establishments and 40,486 employes. Of the 104 strikes, 23 succeeded; 26 succeeded partly; and 51 failed.

Population of Canton.

The following particulars are taken from the North China Herald:

In a recent census taken by order of the viceroy at Canton, the inner and outer cities are shown to contain 481 streets and lanes, 24,962 houses, 233 temples, 107,035 males, and 53,975 females. The eastern suburb has 123 streets, etc., 7,627 houses, 61 temples, 23,738 males, and 14,812 females. The western suburb contains 875 streets and lanes, 43,942 houses, 226 temples, 192,249 males, and 87,355 females. The southern suburb contains 65 streets, 3,476 houses, 33 temples, 13,372 males, and 6,402 females.

Altogether there are 336,754 males and 162,544 females, 80,007 houses and 553 temples. There is also the boat population, which, sixty years ago, numbered 80,000, giving, at three persons per boat—much too low an average—a population then of 252,000. This number must be now largely increased, and 350,000 to 400,000 would probably be nearer the mark—children are not included probably. This brings up the population should nearly have doubled itself, and the estimate now given by foreign observers is 1,800,000. A poll tax is levied on persons without house property, and there is a tendency to underrate the number of persons avoiding taxation. The great discrepancy between male and female population is noticeable. It is ascribed to the fact that the wives and families of most of the workers live in the neighboring country villages. The women live in cheap houses in the country, and the girls stay with their mothers till they are betrothed, and then go to their mothers-in-law. While men abound in cities, the village populations are chiefly female. Representative male heads of families live in the villages, and there is sufficient adult male labor to cultivate the fields. The brothers and sons go to the city.

Canton is a city of workshops, printers, carpenters, workers in lacquer ware, sailmakers, silversmiths, braziers, workers in ivory and tortoise shell, painters on glass, on paper, and on silk; glassblowers, fire-work makers, mat weavers, cloth weavers, embroiderers, paper makers, sugar refiners, fan makers, carpet weavers, makers of china ware, of grass cloth; and jade stone turners. Of all these trades, women only are engaged in embroidery. In addition, men in China cook, run errands, sweep floors, and wait at table. Women only do the washing; hence the marked preponderance of males over females in the city. It may be added that life in the country is much more moral than in the cities, chiefly owing to the family institution being in full operation in the villages.

A CAR lead of red wood for use in making lead pencils was recently shipped from Sanger, Cal., for Nuremberg, Germany. Some time ago, experts from Germany investigated the timber resources of the Pacific coast in an effort to find a substitute for cedar, the forests in Europe from which the supply of that wood for lead pencils has hitherto been obtained having become almost exhausted. It is said that the red wood from the east slope of the Sierras is the only wood besides cedar with a sufficiently straight grain to make it suitable for pencils.