

number, considering the size and circumstances of the great metropolis: in fact, the mortality from this cause during the entire year has been remarkably low. Diphtheria, on the other hand, has markedly increased, there being recorded 165 deaths, as against 85 for September. This is the largest number of deaths since February, with the exception of the month of May, when exactly the same number of deaths occurred as in October. A corresponding increase in this disease is noticeable in the city of Brooklyn. Diphtheria is very prevalent in other cities as well, notably in St. Louis and Chicago. The largest number of deaths in any one day in the month was 118, on the 21st. The largest daily mortality of the year was 240, on the 8th of July.

The mean temperature for October was 54.90° F., slightly below the mean for the past ten years, that being 56.33° F. At 3 P.M. on the 12th the thermometer registered the highest temperature of the month, 78° F. The mean for the past ten years in October is 79.5° F. The lowest temperature was 33° F., at 5 A.M. on the 17th, the mean for the ten years being 35.3° F. The rainfall during the month amounted to 3.07 inches, the average for the decade being 3.34 inches. Taken as a whole, October of the present year may be looked upon as an average October, differing in no important respects from the same month in other years.

#### CO-OPERATION IN A WESTERN CITY.

THE American economic association is to be commended for the practical and educational value of its publications. This association has an object in view, and that object is, by historical and statistical inquiries and examinations into actual conditions, to reach conclusions which will aid in solving the social and economic questions now so prominent.

Following Professor James's admirable monograph on 'The relation of the modern municipality to the gas-supply,' which attracted such wide attention, the association publishes this history of co-operation in the city of Minneapolis, throwing light upon one of the most important phases of the labor problem. Dr. Shaw has had the opportunity of observing the development of the most successful examples of co-operation which this country has yet furnished, and in a clear and pleasing style has sketched their organization, growth, and results.

The most valuable part of this monograph is that giving the history of the co-operative coopers

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of Minneapolis. In the introduction, reference is made to the marvellous growth of Minneapolis, now the largest wheat-receiving market and flour-milling centre in the world; the daily capacity of the mills being about thirty-five thousand barrels. To supply the demand for barrels requires about seven or eight hundred coopers, a large majority of them working in co-operative shops.

The co-operative movement in this city dates from the spring of 1868, when several journeymen coopers informally opened a co-operative shop. This experiment, owing to the want of proper organization and management, was short-lived. A like attempt in 1870 came to an end for similar reasons.

In 1870 began those experiments which have made Minneapolis the milling centre of the world, and as a consequence this city became a coopers' Mecca. From 1871 to 1874 the journeymen coopers were able, through their union, to secure good terms from the 'bosses.' But, owing to the constantly increasing number of coopers, employment became precarious, and wages were forced down. To escape the unjust and often tyrannical treatment of the bosses, a number of the journeymen decided in 1874 to organize a co-operative company upon business-like principles.

In November, 1874, the Co-operative barrel manufacturing company was incorporated, and business was commenced with a brotherhood of sixteen men, each making an initial investment of fifteen dollars. The most important features of the company's by-laws "are those which provide that all members must be equal shareholders, and that the gains or losses of the business are to be apportioned, not *pro rata* among the members, but in proportion to the work they have done. Losses and gains of a different sort—for example, those resulting from the work of hired help, from outside ventures undertaken by the association, gains from the appreciation of real estate, or losses from fire or from non-paying creditors—are to be apportioned equally among the members. The distinction between the two kinds of profit and loss—one kind affecting the men as capitalists, and the other kind affecting them as laborers—shows keen economic insight, and has great practical value."

From its meagre beginning in 1874, this co-operative enterprise has prospered, until, in March, 1886, the president of the company estimated the cash value of its assets at \$58,000, its total liabilities not exceeding \$13,000. In addition to this, the entire membership of ninety are estimated as property-holders to an average amount of at least \$3,000 each. A majority of the members own homes, and of this number it is interesting to

note that probably two-thirds were aided by co-operative building and loan associations. Dr. Shaw attributes this remarkable success to co-operation; for, so far as he is aware, no co-oper outside of the co-operative shops has similarly prospered.

The history of the other six co-operative barrel companies given in this chapter is in the main similar to that first noted.

From the experience of these companies, Dr. Shaw concludes that they are superior in stability to the non-co-operative shops; that co-operators as proprietors and capitalists have a manifest advantage in competition, for, if necessary, they can dispense with profits upon capital, and rely for support upon their wages as workingmen.

The lessons learned from the experience of these coopers can be applied in other branches of co-operation, especially where piece-work is possible, or where labor has greater relative importance than capital in production.

The account of the Co-operative agricultural colony, established near Minneapolis in April, 1886, contains many valuable suggestions; and, if this colony meets with the success indicated by present prospects, it will doubtless lead to the establishment of other co-operative colonies. A co-operative agricultural colony is apt to suggest the idea of a communistic body like the Shakers; and to correct this notion Dr. Shaw thus distinguishes them: "Communism and co-operation are antipodal in principle. Communism denies the right of private property. Co-operation proposes to enable the destitute to acquire private property. Communism usually asserts control over family relations, and it sacrifices personal liberty. Co-operation adds to the liberty of the individual because it enables him to 'pay the price of his industrial freedom'; and, as I have shown in the case of the coopers, it supplies the conditions that are most favorable to the family institution."

In giving an account of co-operative profit-sharing in the Pillsbury mills, he says, "From the employers' stand-point, I have Mr. Pillsbury's assurance that it pays." It brings about pleasant relations between employer and employee, and works to mutual advantage. The system is not, however, without its inconveniences and petty annoyances.

The Minneapolis co-operative mercantile company was established by the co-operative coopers in 1885, and its success has been very satisfactory. There is no reason why this form of co-operation which has proved so advantageous to workingmen in England should not have like results in this country.

In addition to those co-operative industries mentioned above, Minneapolis has a co-operative laundry, a co-operative painters' association, co-operative building associations, and other co-operative enterprises whose forms of organization are admirably sketched in this monograph.

Dr. Shaw attributes the fresh impulse now being manifested among workingmen to join in co-operative effort chiefly to the growth and activity of the knights of labor.

Co-operation is not prescribed as a panacea for all the present ills of labor. The author recognizes that there must be improvement along many lines, but holds that within certain limits co-operation has not only immediate applicability, but also great remedial virtue. The moral effects are reckoned its highest success. It makes men provident, temperate, and self-reliant. Co-operation is not a religion, and calls for no renunciations. It is merely a question of business advantage, and those engaged in it would not hesitate to give up the system if their condition would be bettered thereby.

This contribution to the labor literature of the day will doubtless be widely read, and lead to good results.

#### PARIS LETTER.

THE very sad and unexpected news of Paul Bert's death reached us yesterday, exciting much surprise, as it was scarcely known that he was ill. As a politician, M. Bert was a man of passionately strong opinions; and his anti-clerical efforts, which soon became an anti-religious warfare, made him many bitter enemies. As to his work in Tonquin, it can hardly be appreciated, as it had only begun. As a scientist, M. Bert had already been virtually dead many years. He had almost entirely given up work of a physiological nature, his attention being given altogether to politics. I have had the pleasure of meeting M. Bert two or three times in his laboratory, and of listening to some of his conversations with his assistants, while he was discussing new experiments and explaining the methods that ought to be followed; and, as he spoke, new ideas appeared to be constantly coming. With a trained and intelligent corps of assistants, he would have done great work. His head was ever full of new ideas, of ingenious methods, but he required assistants to catch the ideas as they came, and to work according to his directions.

At a recent meeting of the Academy of sciences, M. Pasteur read an interesting paper on the progress of anti-hydrophobic inoculation. Up to the 31st of October, 2,490 persons had been treated at