

TANDEM COMPOUND HIGH-SPEED ENGINE.

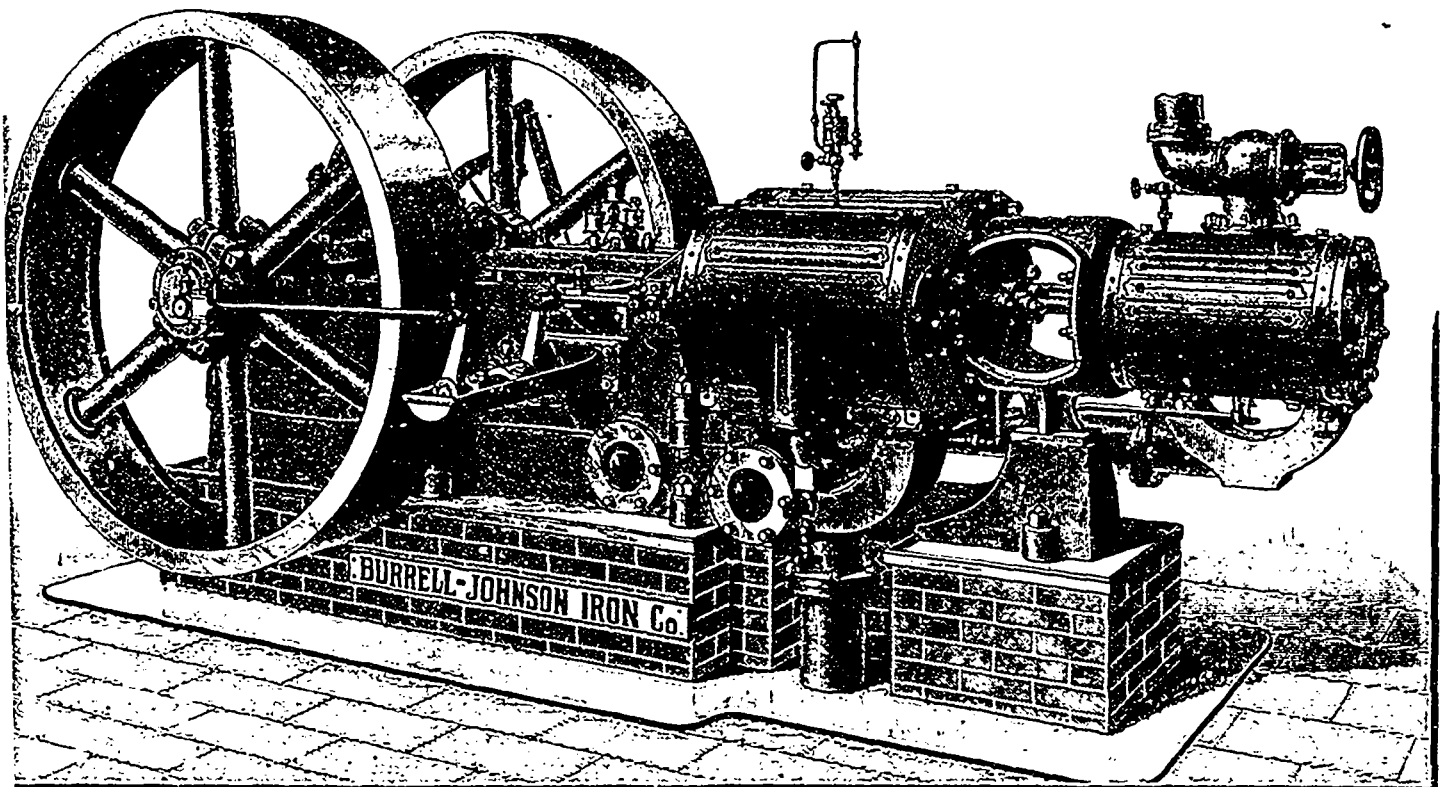
The eminence which eastern Canadian firms are attaining in the way of engineering works, may be well illustrated by the accompanying engraving of a new tandem compound engine of the high-speed type, manufactured by the Burrell-Johnson Iron Co., Ltd., of Yarmouth, N.S. This particular engine is of the Fitchburg pattern, for which this firm have the rights in Canada, and has been installed in the power-house of the Yarmouth Street Railway Co. When a representative of *THE CANADIAN ENGINEER* visited Yarmouth recently, it had just been started, and J. S. Skinner, the engineer, was proud as a peacock of the new engine. Certainly he had good reason, for this engine is as fine a piece of workmanship as was ever turned out in Canada. Since then, Mr. Skinner has reported of it as follows: "It is giving perfect satisfaction. It is very neat in appearance, strong and durable. It runs perfectly cool and noiseless, and as

on the floor or foundations. The valves are of the piston pattern, perfectly balanced, and are so constructed that they can be adjusted for wear. The whole machine is very compact and substantial looking, with every chance for overhauling and adjusting. The main bearings have a separate adjusting block at the back, which takes up all wear, keeping the main bearings running perfectly even without jar or rattle.

The Burrell-Johnson Co. make these engines both simple and compound, in various horse-powers, and guarantee their work.

PROFIT SHARING.

An association for promoting the principle of profit sharing has been formed in Boston with Carroll D. Wright, the well-known statistician, of Washington, as president, and the Rev. N. P. Gilman, 25 Beacon st., Boston, as secretary. The plan of giving employees in industrial establishments a share in the profits of the



for workmanship and close regulation there is no better. Our voltage stands the same, let it be light or heavy loads. As all know the sudden change of load to which a street railway generator is liable, I think the engine gives as near perfect regulation as can be had."

The engine is 145-horse-power, with high pressure cylinder, 12 inches; low pressure 18 inches; stroke 13 inches. It is to run 250 revolutions per minute. It has two fly wheels, 66 inches in diameter by 12½ inch face. The engine is non-condensing, and is fitted with a bed to form a jet condenser, to be used when the water supply is adequate. It is beautifully finished, with cast-iron lagging on the cylinders, is nickel-plated with nickel-plated eccentric rods. The crank is a solid steel forging, cut out, with cast-iron counter-balance keyed on, making a strong and durable crank, with very large bearings and wearing surfaces. The connecting and other rods are made of steel, with all chance for adjustment for wear. The oiling is done with signal oil cups, and all oil and water have trays and conducting pipes to carry off the surplus to a small box at the end, so that it is impossible for oil to be wasted or get

business has already been successfully adopted by several Canadian firms, and the principle is making sure headway in Europe and America alike. The new association, in anticipation of a revival of business in the States, has issued a circular to manufacturers calling their attention to the importance of introducing some form of profit sharing. The method of paying a dividend to the workmen out of profits as they are realized annually, has been approved by most of the economists of Europe and America as thoroughly practical, and advantageous to both the employer and the employed. Profit sharing can be adopted by an employer without risk of loss, inasmuch as he assumes under it no obligations except such as are to be discharged from profits actually made. His prerogatives as manager and his rights as proprietor are not curtailed. Profit sharing would establish a more friendly relationship of common interest between working people and the employer. This would be the surest pledge of industrial peace and the firmest support in times of commercial distress. The employee, responding to such an advance by the employer, can