

We all know that the factory hand is a much more common object than the contented small employer ; and this is the direct result of the extremely unfavourable condition in which such small employers are placed as regards the obtaining of mechanical power. As a consequence they have to work with antiquated tools : for almost all the great technical improvements pass over without touching them, the first requirement for their application being the possession of motive energy ; so that they shortly fall hopelessly behind in a race in which they are so heavily handicapped. How can it be otherwise when it is remembered that they must pay from 4 to 10 times more for power than the more fortunate capitalist does ; and are at the same time encumbered with taxes and regulations by the authorities levied upon the possession of prime movers in the midst of populous cities ?

Sooner or later it must come that the small employer will obtain for himself the advantages accruing from the economical use of power which are at present the monopoly of the capitalist alone.

The great technical advances recently made in electricity and in the use of compressed air evidently point to the speedy accomplishment of this desirable result. And in a very few decades we may confidently predict the removal from our manufacturing cities of all the wasteful and noxious gas-producing prime movers now used ; in their stead the employment of more convenient and more economical secondary motors supplied from mains in the streets which lead the working fluid from well conducted and favourably situated power supply stations. When the time comes, compressed air as an energy medium will be found to be an irrepressible young giant demanding and exacting his due recognition.

My best thanks are due to Mr. Len B. A. Sc. of McGill College for valuable help in connection with the estimates of cost ; and to Mr. G. S. Smith, B. A. Sc. of McGill College for much careful assistance without which the preparation of this communication in the midst of a busy session would have been almost impossible.