

ENGINEERING IN ENGLAND DURING 1914, AND OUTLOOK FOR 1915.

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IN the early part of the year 1914 there were indications in England of reaction from the prosperous years which preceded it, and although as time progressed the effect upon industrial operations was not so marked, or the diminution in trade so rapid, as was anticipated, the decline was nevertheless appreciable and this was reflected in the increasing percentage of unemployment during the first six months of the year, the percentage rising rapidly from 3.6 per cent. at the end of July to 6.3 per cent. at the beginning of September, which percentage, however, steadily declined after that date. This was primarily due to two causes, namely, the large and important orders for war material and the large number of men drafted into the Regular and Territorial Army, necessitating the employment of other hands to fill their places.

The advent of the war, whilst having a stimulating effect upon certain engineering branches of industry, more especially those capable of undertaking War Office materials and supplies for the Navy, undoubtedly had a depressing effect both upon the trade of the country in general and upon engineering enterprises in particular. As a general rule it may be said that only such undertakings as were actually in progress and under contract for completion were proceeded with, and many of these could not be actively continued on account of the uncertainty of the money market, and partly in consequence of the moratorium, which acted as a deterrent to rapid procedure with work in progress. This not only applied to constructional works by private enterprise, but to a very large extent also to public works. Railway companies, both in this country and the British colonies and dependencies, and even in India, limited their contracts for supplies, renewals and extensions to such works as were of primary importance or urgent necessity, whilst public bodies and municipalities restricted their expenditure in the main to relief works and to such improvements as would provide employment, rather than to the improvement or enlargement of the areas under their control.

As regards private enterprise, the many schemes in contemplation both in this country and abroad with respect to new railways or feeder lines, water supply, sanitation, the improvement of electrical supply, and even tramway and motor traction, were perforce for the time being either held in suspense or abandoned until after the war, with the inevitable result of greatly minimizing if not altogether stultifying the labors of the professional men engaged in the promotion of such enterprises. In normal times this state of uncertainty could not fail to have a most depressing effect both upon professional and commercial branches of industry, as well as upon trade generally, but, in the exceptional circumstances which have now to be faced, there is generally a spirit of submission to the inevitable, combined with a strong patriotism, which has engendered a universal desire to share in the present sacrifices of the common lot, and at the same time to take an optimistic view as to the revival of prosperity after the advent of peace.

Much has been said and written upon the question of capturing the engineering export trade from Germany,

but little if any tangible result has so far been achieved. It is perfectly obvious that if anything is to be done at all it must not only be done soon, but effectively, and should be undertaken collectively and in combination rather than individually, and as the result of careful deliberation and research. The British manufacturer must not only be prepared to produce in larger quantities, but even to establish new industries. The principal difficulty appears to be chiefly one of manufacturing cost, and the feeling is general that, whilst it may be possible to supply the present demand for goods of German design at prices slightly above those charged hitherto by German manufacturers, the flow of orders is not likely to be so constant after the war as to justify the expenditure of capital in putting down new plant and producing in large quantities with the attendant risk of fiercer competition which will then undoubtedly ensue in order to recover the trade lost to Germany, an operation in which the German government may, and probably will, assist by bounties or other financial aid on a large scale.

In view of the necessity at the end of the war to revise the commercial treaties between Russia, Germany and Austria, and having regard to the importance of Russia as a market for British goods, there is an obvious increased opening for British enterprise in Russia, and this would no doubt receive preferential welcome in that country, and thus ensure stability and expansion for a great variety of trades which up to now have been more or less fluctuating.

The opportunities for the professional or consultant in engineering business have been very limited since the outbreak of the war, and whilst undoubtedly there must necessarily be a great deal of reconstruction work undertaken after the war, chiefly abroad, it is probable that the bulk of this work will be undertaken locally and by the professional and skilled staffs of, or belonging to, each particular country concerned, and the material will also be largely supplied locally, though some of it may possibly have to be furnished by other friendly nations.

The practical immunity of England from damage will remove any necessity for reconstruction works here, and so far as can be seen at present no large new undertakings are likely to be taken in hand in the immediate future. Such works are generally forecasted by the applications to Parliament for the necessary powers, and if the list of plans deposited for the ensuing session of 1915 is any indication of the works contemplated, very little will be undertaken. Only four railway bills, as against twenty-three of last year, have been deposited, and these are for comparatively small powers, and out of the six tramway bills (as compared with four last year) that of the London County Council for improvements appears to be the most important. Instead of fifty miscellaneous bills deposited last year there are only thirty-four for the session of 1915, and these chiefly by municipal authorities for additional powers. With regard to electric lighting powers and schemes, there are seventy-three applications for provisional orders, as against fifty last year, but none of them appear to be of any great consequence.

Thus it is apparent that municipal and other public bodies, as well as the railway companies, are limiting their new undertakings to such works of necessity as cannot conveniently be postponed, and are leaving to more propitious times other works of magnitude, which, though desirable, may involve large capital outlay both in their design and practical development.