

ANGLO-EGYPTIAN COMMERCE.

THE present war—if such is the proper designation of the contest now going on—has already proved a fearful misfortune for the Egyptians. Owing to the withdrawal of the European capital which for a quarter of a century has been developing the resources of the country with such wonderful rapidity, the gathered crops are now lying in the fields unsold; the native grower can neither continue his cultivation nor pay his taxes, and thousands of native workpeople are threatened with starvation. Since the recent troubles the rate of interest has largely advanced, commerce is paralyzed, and natives are unable even to buy coal to work the irrigating machinery on which the very existence of some of their crops depends. Unaided, the natives are incapable of conducting an export trade. As mechanics and in the management of railways, factories, and, indeed, of industrial undertakings generally, they depend on the skill and experience of Europeans, who, however, only occupy the position of heads of the departments, and seldom acquire landed property. Of the many sources of wealth which have been created in Egypt through European influence there is none more remarkable than that of cotton seed. This product was formerly burned in bath-houses and ovens, and even thrown away. The total value of the crop is now nearly £2,000,000, of which 90 per cent. is exported to England. In the year 1881 120,000 tons came to Hull alone, and, as the crushing of the seeds costs about 7s. per ton in labor paid to workmen, the loss to the 2,500 men and boys so employed may be easily imagined if the trade were stopped. Although the stoppage of cotton-seed imports would inflict a serious loss upon English crushers and their workpeople, the effect would be still greater on agriculturists. The cotton-seed constitutes about one-half of the total importation of oil seeds into England, and the loss of this portion would naturally enhance the price of the remainder, and would render the feeding of cattle much more expensive. Further, it would be impossible to find a substitute for cotton cakes, as no other oil-cake possesses the same astringent properties. The English soap-boilers would likewise be affected by the non-production of some 50,000 tons of oil annually yielded from the same source. At a moderate estimate the corn exports from Egypt, consisting chiefly of wheat and beans, are about 1,000,000 quarters annually, valued at £1,750,000—about 70 per cent. or 75 per cent. of which goes to England. Of sugar, some 30,000 tons are produced, valued at £600,000. Of wool, ivory, gum, etc., the exports may be taken at £500,000, nearly all of which is sent to England. Her imports consist chiefly of manufactured goods, machinery, coal, &c., the total being from £5,000,000 to £6,000,000, of which England contributes four-fifths. But by far the largest and most important article of export from Egypt is that

of cotton. This crop about twenty years ago was hardly a third of its present amount. The average crop is now about 280,000,000 pounds weight, valued at £9,000,000 sterling, of which two-thirds go to England. In the Boston district alone some 5,000,000 spindles are employed on this staple and 20,000 hands occupied; and if we take 2,000,000 spindles for other districts, even excluding Scotland, we may safely assert that fully 25,000 workpeople, whose earnings amount to £1 per week each, would be affected by the stoppage of the supply of Egyptian cotton. Thus the loss both in wages and the disorganization of trade, including also the enormous export trade of cotton goods to Egypt, in which printing, bleaching, dyeing, and other Lancashire industries are concerned, would be of serious moment. England has also enormous interests in the shipping trade with Egypt, and it is clear that, whatever may be the importance of the Suez Canal for Indian purposes, that route is of the greatest utility in her trade with Egypt, the Red Sea, the East Coast of Africa, Arabia, and the Persian Gulf. The shipping trade in coal alone is a huge item, the profitable character of which depends very much upon the return freights from Alexandria, many of the charters to carry coal to Port Said being made upon an assured return cargo from Alexandria. The canal steamers, therefore, profit by this arrangement, and the English carrying trade is largely assisted. Since the opening of the Suez Canal an almost fabulous capital has been invested in steamships running between the United Kingdom and India, China and Australia. It would be within the mark to say that 60,000 tons per week of steam tonnage of the regular lines leave British ports for the above-named countries; and valuing this property at £18 per ton, we have a capital of £2,160,000 to represent British steamers of the regular line engaged in the eastern trade leaving and arriving at ports in the United Kingdom every week. If the canal passage were stopped these steamers would no doubt take the Cape route, but the cost of transit would be greater, the distance to Calcutta by the canal route being 8,000 miles, that by the Cape 12,000. A certain increase in the cost of production would ensue, owing to the larger tonnage required for the voyage. These difficulties, so far as the distant markets of India and Australia are concerned, would soon be modified, and even overcome in time; but the continued supremacy of English commerce requires that the existing arrangements be maintained. Hence the formidable efforts now being put forth, very probably to be followed by the extension of the theatre of war on a vast scale in Europe, Africa and Asia.

OCEAN TELEPHONY.—An interesting telephonic experiment was recently made between Brussels and Dover. A submarine cable is practically a condenser, which, by its inductive action, materially interferes

with the speed of signalling. It was feared that this condensation would prove for a long while a great difficulty in the case of telephonic currents, so transforming them as to render them unintelligible. The difficulty, however, has been overcome, the honor of the achievement belonging to a distinguished Belgian physicist, M. Van Rysselberghe. On the 9th of June the new telephonic apparatus, designed for the purpose of counteracting the effects of induction on air lines and condensation in submarine cables, was tried with success. Conversation was freely exchanged through the sixty miles of cable and two hundred miles of air line. The experiment is very hopeful for ocean telephony.

ELECTRICITY AS LIGHT AND MOTOR.

INVITATIONS have been issued by the management of the Manufacturers and Mechanics' Institute Exhibition of Boston, to all the electric-lighting companies in the United States, and agencies of those abroad, to make a display of their systems of lighting, both arc and incandescent, at the next exhibition, and without doubt a very large display will be made. If this should be successful, there will be a display of electric lighting there which will interest all manufacturers who are looking towards the inevitable. A number of steam engines will be furnished, and some high speed motors, with an especial view of furnishing power for the dynamo machines for electric lighting. This is expected to be one of the most interesting exhibits in the whole display, and one of the most instructive as well. The uses to which electricity has been applied are becoming more and more numerous; and it is not improbable that heating by electricity will also be exhibited at the same time and place as the lights. "We have ourselves" says a Boston paper "eaten beefsteak and eggs cooked by electricity, which few men can say. Material for doing it is here; and as we write this, a heater with 600 inches of radiating surface is hot in our press-room. This will perhaps be something novel to those who never expected to cook their steak, eggs, bacon, and coffee by electricity, while the same current, after having done its work in furnishing food, had gone further on its way, and was giving light for any purpose, either mechanical or industrial."

THE BRITISH COMMERCIAL MARINE.

IN spite of the fact that a week or two ago English ships were carrying grain across the Atlantic, from United States ports, for almost literally nothing, the increase in ship-building in the mother-country goes on with marvellous rapidity. The increase in the tonnage of steamers during the last twelve months is at the rate of 9.6 per cent., and of sailers rather more than 7 per cent. This surprising expansion is the more remarkable when it is remembered that it remains, after provision has been made for vessels lost at sea, or superannuated, or sold to foreigners. The fact that the quantity of