

support of the public, they cannot be expected to produce scientific instruments to compete with the standard of excellence obtained on the Continent—for several reasons, amongst which the following are the most important where microscopes are concerned.

The number of skilled lens-workers capable of making high-power objectives is very small, and to train suitable labour for, say, making $1/12$ -in. oil immersion objectives of the ordinary achromatic series could not be accomplished in less than three or four years. A dozen or so of these skilled workers could be given employment immediately.

The profit on microscopes is not very remunerative, and unless some protection such as importation under licence is established, no fresh capital is likely to be forthcoming; and even if it is, some years will elapse before those investing their money will see any return, on account of the time required to train labour for this highly skilled occupation.

If some protection is granted to the trade, the manufacturers must set a higher standard of excellence on their goods than they did before the war, otherwise they cannot expect support from the public; but if support is forthcoming we feel sure manufacturers will reciprocate by turning out goods not only at a lower price, but also of a better quality.

It was chiefly on account of the excellent standard attained that Continental manufacturers obtained the lead before the war. Individual pieces of apparatus have been made in England equal to any produced on the Continent, but, unfortunately, only a very small percentage of the supplies ever reached the standard. If English manufacturers will only pay more attention to inspection, and set a much higher standard of quality than they did before the war, there is no reason why the purchasing public should buy foreign-made instruments. There is also no reason why any instrument previously manufactured on the Continent should not be produced here.

C. BAKER.

244 High Holborn, London, W.C.1.
May 14.

WE do not think Prof. Bayliss and Mr. Munby will find that the prices of British-made laboratory apparatus have increased to the same extent as have those of some other manufactured articles—for example, leather or metal goods, soap, stationery, etc.

Last week a catalogue reached us from a well-known German firm specialising in certain optical goods. The pre-war prices are subject to an advance of 200 per cent., the basis of payment being 20 marks = 1*l.*, and cash to the value of 50 per cent. of the order is required at the time of placing it. Thus such imported goods are three times as costly as before the war.

At present the prices of our instruments are from 75 to 120 per cent. above pre-war German prices for instruments which are now admittedly more convenient and efficient. This is particularly the case in regard to one instrument, which for forty years prior to the war had been built by a German firm practically upside down.

Again, we supply certain optical testing instruments which are set at the National Physical Laboratory to an accuracy six times greater than was found in the standard instrument of German origin.

It would seem essential that the manufacture of scientific apparatus in this country should be encouraged to the fullest possible extent in order that trained workers may be available in emergency; for even

supposing war to be impossible in the future, if such manufactures become the monopoly of another country we shall, sooner or later, be paying still higher prices by reason of that monopoly.

As no specific kind of apparatus is mentioned by Prof. Bayliss or Mr. Munby, we have replied as makers of two particular classes of optical testing instruments. These instruments are entirely British as regards optical and mechanical design, as no progress is to be made by adopting and copying designs which have easily demonstrable shortcomings.

BELLINGHAM AND STANLEY, LTD.

71 Hornsey Rise, London, N.19, May 10.

WITH regard to the letters by Prof. Bayliss and Mr. Munby in NATURE of May 6, we would say that, generally, we are in agreement with the report of the Branch Committee on Scientific Apparatus, of which I was chairman, an abstract of which is published in the report of the Engineering Trades (New Industries) Committee of the Ministry of Reconstruction.

We have very little sympathy with those who would bolster up our industry by levying heavy duties on imports, and, generally, we think that the result of such a policy would be to increase the cost of home-made goods without improving their quality; but there is a good deal to be said for preventing goods made abroad being dumped in this country at prices lower than those prevailing in the country of their origin. The inevitable result of permitting this is to discourage or kill our own industry, and this is well exemplified in the case of our watch industry.

Scientific men cannot, however, have dumped and, consequently, cheap scientific apparatus from abroad and at the same time a flourishing apparatus industry at home producing goods of the highest quality at the lowest prices.

WM. TAYLOR.

(Taylor, Taylor, and Hobson, Ltd.)
Leicester, May 11.

WITH reference to Prof. Bayliss's letter in NATURE of May 6, members of this association are in complete agreement that scientific workers should be able to obtain the very best quality apparatus.

I quote the wording of our communication to the Board of Trade (Scientific Instrument Branch) in connection with the proposal to form a special Licensing Committee on which scientific authorities would be represented: "They would have power to allow the imports of all apparatus which cannot be produced of efficient quality or in sufficient quantities in this country to meet the demands."

But the menace to British manufacturers is the abnormal rate of exchange with Germany, which enables apparatus to be brought in at anything from one-fifth to one-tenth of the normal value.

No workshop organisation or economy can possibly compete with such values, and it is during this unprecedented and abnormal state of international finance that British manufacturers are asking for temporary prohibition of imported apparatus at purely artificial prices.

H. W. ASHFIELD,

Secretary, British Lampblown Scientific Glass-
ware Manufacturers' Association, Ltd.
2-3 Duke Street, St. James's, London, S.W.1,
May 11.