serious attempt last year, and they were almost successful, for M. Raymond Lambert and the same Sherpa Tensing got within 800 ft. of the summit. It is a great tribute to the Swiss party that, in the true spirit of mountaineering brotherhood and international co-operation, so characteristic of their country, they imparted all the hard-earned details of their climb to this year's expedition.

Finally, mention must be made of the part science and technology have played. It is no belittlement of the prowess of the climbers to say that without oxygen they would never have succeeded, and this year has seen the improvement of the 'open-circuit' oxygen apparatus and the novel development of a 'closed-circuit' apparatus; incidentally, it has been reported that the first assault with the latter type was unsuccessful and that Hillary and Tensing, who were the second pair to make the attempt, used 'open-circuit' masks. Then again, the developments during the past decade and more of synthetic materials, and the experience gained of the physiology of human exposure and acclimatization, together with other recent advances of science and medicine, have all played their part. Nevertheless, any expedition reduces in the end to a battle between man and Nature, and rash indeed would he be who would prophesy that in future man will always be the victor.

It has since been announced that Mr. Hillary has been made K.B.E. and Colonel Hunt has been created a knight; Sherpa Tensing is not a British subject and the question of recognition of his achievement is under discussion.

The Wiles Lectures at Queen's University, Belfast

The Queen's University of Belfast has received a gift of £7,500, to be spent over the next 7–10 years, to promote the study of the history of civilization and to encourage the extension of historical thinking into the realm of general ideas. The gift is from Mrs. Austin Boyd, of Cultra, Co. Down. It is to be used to endow an annual series of about four lectures, to be known as the Wiles Lectures, in memory of Mrs. Boyd's father. The purpose of the endowment is not to popularize history, but rather to invite a few historians of distinction to reflect on the wider implications of their work, and to embody their reflexions in the lectures and in a book. It is hoped that the Wiles Lectures will bear fruit in two ways: on one hand by encouraging some younger historians to enter the difficult field of research into the history of ideas; and on the other hand, by broadening eventually the basis of the teaching of history in schools, so that more emphasis is put on supra-national than on national movements. The benefactress hopes to make a further gift to the Queen's University so that the purpose of the endowment may be continued beyond the experimental period of 7–10 years. In administering the endowment the Queen's University will be advised by a committee including its own professor of modern history, together with two scholars to be invited from other universities.

Natural Gas in Britain

At a recent meeting of the Institution of Gas Engineers, Sir Harold Smith, chairman of the Gas Council, stated that an intensive, large-scale search for natural gas in Great Britain is to begin in the near future. The supply of good gas-making coal is decreasing and becoming more difficult to win, and therefore every possibility of developing methods of using coals normally considered unsuitable for carbonizing by orthodox means should be considered; further, the efficiency of existing carbonizing processes should be improved. But this is not enough, for the urgency in these matters is dictated by rapidly increasing cost of coal, and it is necessary that investigation into new supplies of gas from natural sources should be undertaken. In co-operation with the Anglo-Iranian Oil Co., Ltd., the Gas Council is proceeding with a scheme of exploration for natural gas in Britain estimated to last about five years. No rosy vista of commercial success can be envisaged, judged by past records, of which Heathfield, Sussex, is the classic example. None the less, a search sufficiently wide and deeply spread in Britain will at least settle once and for all this controversial problem of the occurrences of natural gas, and to this extent the scheme appears justified.

Glass in Chemical Industry

Glass has for many years held pride of place in the field of laboratory apparatus, and in recent years its use is being extended to chemical industrial plant where the dimensions are on a very much larger scale. For the supply of laboratory glassware (mainly heat-resistant borosilicate glass) a well-known name is Quickfit and Quartz, Ltd., a firm which has built up a reputation in the manufacture of ground-glass standard interchangeable conical joints, whereby complicated pieces of apparatus can be built up from a relatively small number of standard components. The firm started before the Second World War at King's Norton, near Birmingham, and in 1946 transferred most of its work to Stone in Staffordshire (see *Nature*, 164, 907; 1949). Production at Stone is now in full swing.

The latest developments at Stone are mainly in the field of large pieces of glassware, and one of the most interesting processes that has recently been put into operation is the electric welding of large joints. Though this process is well known in the United States, where electricity is much used and the gas industry is small and, being based on natural gas, is not suitable for glass-working, the method has only been recently introduced into Great Britain. The method is at present only suitable for joints of a simple shape, such as putting on the neck of a flask, but the dimensions can be relatively big (for example, 20–30 cm. diameter). The two parts to be joined are mounted on a glass-working lathe, brought almost together and rotated between electrodes placed at opposite ends of a diameter. The electrodes are hollow and carry small gas-flames which heat up the glass and thereby reduce its electrical resistance from the order of megohms to thousands of ohms. The current is then switched on from a 120-kc./s. generator of 25 kVA. output. The current passes over the small gaps from the electrodes and flows through the glass, heating it uniformly through the body of the work but at the same time over an annular volume that is very narrow. The power factor is usually 0·5–0·8, and when the joint is made and the glass molten the current is about 3 amp. at about 10 kV., some 12 kW. being dissipated in the glass. The frequency of the generator is not critical; but at 120 kc./s. the voltage can only burn and not electrocute in the event of an accident to an operator. The main advantage of this method is the uniform heating through the glass and the small volume of heating as compared with large gas-flames, which heat only on the surface and over

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