

the greatest contribution of the year to mechanical engineering science.

Cotton, Silk and Man-made Fibres Research Association

THE report of the Cotton, Silk and Man-made Fibres Research Association for the year ended March 31, 1963, submitted to the forty-fourth annual general meeting on October 31, 1963, covers the second year of the fusion of the British Cotton Industry Research Association and the British Rayon Research Association and some of the final stages of the necessary changes in organization and administration (Pp. 27. Didsbury, Manchester: The Cotton, Silk and Man-made Fibres Research Association, 1963). Work has continued on the 'sandwich blender' developed for restoring some of the mixing of fibre that was lost when stack mixing was eliminated from spinning mills, and successful mill trials have been made with a moisture-measuring indicator fitted to a scutcher, so that the moisture content of each lap produced can be seen and precise correction made for moisture content. The design of the 'Shirley' Pressure Point System for dust extraction has been modified to cope with dust produced at high production rates, and an extensive system of trials has shown that for most purposes a two-for-one-twisting machine gives as acceptable a product as a ring doubler. Commercial trials of a fluid-bed hot-stretching unit gave yarns superior to those processed on conventional equipment. A research programme on problems arising in weaving synthetic stretch yarns has been initiated: investigations with sodium bromate indicate that it may be superior to enzymes for certain applications in desizing, while a peroxide bleaching assistant has been made available that improves the whiteness and reduces consumption of peroxide. The divinyl ethers are being examined as cross-linking agents for cellulose—some appear to cause less deterioration of strength and abrasion resistance of cotton fabrics for a given improvement in smooth-drying properties than conventional agents; a method has been discovered for preparing cotton and cellulosic rayons in a high state of molecular disorder that can be later restored to good order by further treatment. A new 'Shirlastain' giving a more satisfactory distinction between cotton and rayon has been developed, and two analogue computers, constructed to facilitate the analysis of different designs of washing range, have been used to determine the most economical way of using water in an industrial six-box washing range.

Reorganizing the Machinery of Government

ON December 17, the Prime Minister, Sir Alec Douglas-Home, rejected a suggestion to set up a committee, similar to the Haldane Committee of 1918, to examine modern problems of the machinery of Government. He thought that the reorganization of education and science already contemplated, following the reorganization of defence, met present needs. However, while rejecting the idea of a committee, he said that the Government was looking into the reorganization of the machinery of Government.

Contributions to International Co-operation

IN answer to a question in the House of Commons on December 17, the Secretary for Technical Co-operation, Mr. R. Carr, said that, subject to Parliamentary approval, the Government had pledged contributions for 1964 of 6.25 million dollars to the United Nations Special Fund, and 3.75 million dollars to the Expanded Programme of Technical Assistance. These were the same as the amounts pledged for 1963 when they were increased by 23 per cent. At the recent United Nations pledging conference, 87 countries offered 74 million dollars and the United States a further 60 million dollars on the understanding that their contribution did not amount to more than 40 per cent of the contributions paid.

Funds for Cancer Research

REPLYING to a question in the House of Commons on December 17, the Minister for Science, the Right Hon. Mr. Quintin Hogg, said that in 1962-63 the Medical Research Council spent £750,000 specifically on cancer research, and this was expected to rise to about £950,000 in the current year. To this must be added relevant research by the universities and at hospitals in treating patients; much basic research which might well throw light on problems of cancer was also supported from public funds. Two distinguished official scientists were at present discussing in Paris General de Gaulle's proposal for an international institute. Research activity must depend on the availability of manpower and of promising leaders. Mr. Hogg assured the House that as regards the Medical Research Council, research into cancer was in no way hampered by lack of funds.

Continental Shelf Bill

THE Continental Shelf Bill, which received its second reading in the House of Lords on December 3, originated in the Conference on the Law of Sea at Geneva in 1958, which resulted in the Continental Shelf Convention and the High Seas Convention. The former, which the Government intends to ratify if the Bill becomes law, clarified international law concerning those large submarine areas outside the territorial seas where the depth of the water allows the natural resources of the sea-bed and subsoil to be exploited. In moving the second reading, Lord Derwent said that to Britain the exploitation of the continental shelf offers, in particular, the possibility of finding oil and natural gas close at hand and under her own control. In the North Sea—the main area of interest at the moment under the Bill—Britain will have rights over any deposits up to a line half-way across to Holland, Belgium and other coastal States, subject to any adjustments resulting from the negotiations that the Government proposes to undertake after ratifying the Convention. Britain's rights under international law are vested by the Bill, as regards oil, natural gas and coal, in the Crown or in the National Coal Board; other natural resources of the shelf will be managed by the Crown Estate Commissioners. Clause 4 enables the Minister of Transport to ensure that installations are sited where they will not interfere with shipping using recognized sea lanes, and Clause 2 authorizes the Minister of Power to protect these installations by prohibiting ships from entering specified areas surrounding them. Other clauses relate to the discharge of oil from pipe-lines and installations, the protection of submarine cables and pipe-lines, the use of wireless on or near installations, giving effect to the obligations undertaken by the United Kingdom in ratifying the High Seas Convention.

British Nuclear Forum

A BRITISH Nuclear Forum was formed recently at a meeting held at the Federation of British Industries. Its first president is Sir William McFadzean. The Forum will provide a point of contact and means for discussion between organizations in the United Kingdom concerned with nuclear energy, enabling them to co-ordinate their approach on matters of common interest. It will constitute a national point of reference on nuclear affairs by acting as a channel for information and expression of views. The Forum's other objectives are to represent the interests of Britain's nuclear industry with other national or international bodies, and to co-ordinate British participation in international conferences and exhibitions concerned with nuclear energy. It will also publicize at home and overseas British nuclear achievements and developments. Membership is open to any British company or partnership, any individual or any professional institution or association including trade associations.